

BOOK OF ABSTRACT



Carina Bildt, Lena Gonäs, Lena Karlqvist and Hanna Westberg (eds)



© National Institut for Working Life & authors 2002

National Institute for Working Life S-112 79 Stockholm Sweden

ISBN 91-7045-640-2 http://www.niwl.se/ Printed at Elanders Gotab, Stockholm

Welcome the participants of the Third International Congress on Women, Work & Health in Stockholm on 2–5 June of 2002

We want this international and interdisciplinary congress to be a meeting place for researchers and practitioners, for the social partners – trade unions and employers alike –, for representatives of governments and not least feminist activists. Our hope is that the congress serves as a forum for open and critical discussions, where participants share practical experience and scholarly work on the many issues pertaining to women's working and living conditions and their health.

For each of the three congress themes two invited keynote speakers, one scholar and one practitioner, are going to present the state of art on science and practice. Others again will give presentations on actions and strategies used in the past, worked with at present and planned for the future. A great number of thematic sessions have been arranged for the presentation of papers and posters, for discussions in symposia.

The series of congresses on Women, Work & Health was initiated in 1996 in Barcelona with the aim of giving access to information and resources that would enable women to achieve improved health and a better quality of life.

The second congress, held in Rio in 1999, provided a forum for greater visibility for the production of knowledge. The event also helped to spread awareness of an inter-related gender, work and health approach throughout Brazil and Latin America.

Hoping that the Stockholm Congress will mean an important move ahead, we are welcoming you to the Third International Congress on Women, Work & Health.

Inger Ohlsson
Director General
Chair of the Organising Committee

Practical information about the book of abstracts

This book holds all abstracts of the presentations that will be given in the parallel sessions during the four days of the congress.

Numbering of the abstracts: The different types of sessions are marked in order of appearance with 01, 02 etc. An additional number guides you to the exact presentation of each individual abstract. The principle of abbreviations and numbering of the sessions is as follows:

Day: Su = Sunday; Mo = Monday; Tu = Tuesday; We = Wednesday

Type of session: W = workshop; S = Symposium; P = Poster session

An example: Workshop "Gender inequality at work and at home" is indicated by MoW02. Meaning Monday, Workshop no. 2. The presentations at this workshop run from MoW01:1 to MoW02:5.

The abstract book is co-ordinated with the programme booklet. By checking in the programme booklet which sessions you wish to attend, you can find the corresponding abbreviations in the abstract book allowing you to know the contents of presentations.

Please be aware that changes in the program may occur. We refer you to the whiteboards at the congress site where any change in the programme will be announced.

Acknowledgements

We are grateful to everyone who has contributed to this book of abstracts, and we are especially indebted to:

Wuokko Knocke, for sharing her deep knowledge and experience of both scientific and international work and, not the least, for sharing her linguistic talent.

Britt Lindqvist, for keeping all abstracts in good order, thereby making it possible to put together this book of abstracts.

Elisabeth Winlund, who has edited all abstracts, and without whom this book of abstract would have looked very different, indeed.

Contents

Preface	III
Practical information about the book of abstracts	IV
Acknowledgements	IV
Workshop SuW01 – Globalisation the gender division	
& the labour market transformation, 1	1
Workshop SuW02 – New labour market trends, historical & cultural aspects	4
Workshop SuW03 – Gender and socioeconomic aspects of inequality in working conditions	8
Workshop SuW04 – Occupational exposure – vibrations	11
Workshop SuW05 – Health related to gender and class aspects, 1	13
Symposium SuS01 – Gender, the welfare state and health	17
Symposium SuS02 – Restructuring gender divisions – work and family	21
Symposium SuS03 – Women, Work and European Union Enlargement	25
Symposium SuS04 – Reactivity to laboratory challenge: How can we generalize to stressors in the field?	26
Symposium SuS05 – Sexual harassment is really a new name describing an old problem	29
Poster session SuP01 – Labour market, welfare state and women's work	33
Workshop SuW06 – Globalisation, the gender division and labour market transformation, 2	41
Workshop SuW07 – Welfare systems and labour markets	46
Workshop SuW08 – Chemical exposures, 1	51
Workshop SuW09 – Occupational health and safety, working conditions	56
Workshop SuW10 – Health related to gender and class aspects, 2	61
Workshop SuW11 – Gender sensitive theories in research on work and health	65
Symposium SuS06: Gender and working conditions in an enlarged Europe	70
Symposium SuS07 – Gender budgeting	73
Symposium SuS08 – Balancing work and family life – a health related issue	74
Symposium SuS09 – Women and energy in developing countries	77
Poster session SuP02 – Psychosocial exposures and health effects	82
Poster session SuP03 – Gender and socio economic aspects of inequality in working conditions	86
Poster session SuP04– Occupational exposure – vibrations	87
Workshop MoW01 – Gender mainstreaming and equal pay	91
Workshop MoW02 – Gender inequality at work and at home	95
Workshop MoW03 – Chemical exposures, 2	100

Workshop MoW04 – Working and living conditions in different types of labour	105
Workshop MoW05 – Gender sensitive methods in research on work and health	110
Symposium MoS01 – Everything to gain	114
Symposium MoS02 – Women at the workplace	118
Symposium MoS03 – Women's working conditions and health	121
Symposium MoS04 – Transcending boundaries – interactive research as a potential	123
Symposium MoS05 – Women and development	129
Poster session MoP01 – Politics, legal systems and economic aspects of women, work and health	131
Poster session MoP02 – Occupational health & safety, 1	135
Workshop MoW06 – Gender implications of labour market demands and skills development	138
Workshop MoW07 – Politics, legal systems and economic aspects, health related issues	142
Workshop MoW08 – Psychosocial exposures and health effects in different groups	148
Workshop MoW09 – Monitoring and surveillance of working conditions and health	152
Symposium MoS06 – Human rights for trafficked people	158
Symposium MoS07 – Is a female boss like a lonesome cowboy?	162
Symposium MoS08 – Working conditions and muscoloskeletal disorders	164
Symposium MoS09 and MoS14 – Gender & work-related health issues: Moving the agenda forward, 1	170
Symposium MoS10 – Women and sickness, abscence/disability pension, 1	174
Symposium MoS11 and MoS16 – Union's strategies for equal opportunities and better working conditions, 1	178
Poster session MoP03 – Gender sensitive methods in research on work and health	179
Workshop MoW10 – Politics, legal systems and economic aspects in relation to motherhood	183
Workshop MoW11 – Politics, legal systems & economic aspects, equal opportunities, laws and regulations	187
Workshop MoW12 – Physical exertion	189
Workshop MoW13 – Working and living conditions in different professions	193
Workshop MoW14 – Gender sensitive theories and methods in research – gender bias	196
Symposium MoS12 – Work and life maintenance. Feminine "Polyvalence"	201
Symposium MoS13 – Men and women. Different conditions at work and at home	204
Symposium MoS15 – Women and sickness, abscence/disability pension, 2	206
Poster session MoP04 – Working, living conditions and health	209
Poster session MoP05 – Occupational health & safety, 2	213
Poster session MoP06 – Agents and activists for change. Strategies and practical examples	216
Workshop TuW01 – Politics, legal systems & economic aspects of women, work & health; Women in transition	222

Workshop TuW02 – Gendered aspects of work organisations	229
Workshop TuW03 – Musculoskeletal disorders	233
Workshop TuW04 – Burn-out, work-stress and health	238
Workshop TuW05 – Agents and activist for change NGOs	242
Symposium TuS01 – A new economy? Processes of segregation and integration	246
Symposium TuS02 – Psychosocial working conditions and health in a gender perspective	250
Symposium TuS03 – Union policies for increased equality	254
Symposium TuS04 – Sex and health – a gender equality issue	255
Symposium TuS05 – Women, work and alcohol	257
Poster session TuP01 – Work and family life balance	258
Poster session TuP02 – Chemical exposures and health effects	261
Poster session TuP03 – Reproductive health	266
Workshop TuW06 – Gendered labour market processes	271
Workshop TuW07 – Disposition of work in time and place	276
Workshop TuW08 – Gender ergonomics; Neck-shoulder	280
Workshop TuW09 – Occupational health and safety, different occupations	285
Workshop TuW10 – Facilitators and barriers to employment for vulnerable groups	289
Workshop TuW11 – Agents and activist for change, examples from different regions	293
Symposium TuS06 – Women entrepreneurs and regional development, 1	298
Symposium TuS07 – Women academics	303
Symposium TuS08 – Women, work and gender – inequality and health	306
Symposium TuS09 – Segregation, health and work. Improving conditions for women in Canada, Sweden, and the US	311
Poster session TuP04 – Chemical exposures and health effects, 2	316
Workshop TuW12 – Trafficking and commercial sex work	322
Workshop TuW13 – Domestic violence	328
Workshop TuW14 – Occupational health and safety, working conditions and environment	336
Workshop TuW15 – Work and family balance in different groups	340
Workshop TuW16 – Psychosocial exposure and labour market participation	344
Workshop TuW17 – Muscoloskeletal disorders and psychosocial factors	349
Workshop TuW18 – Agents and activists for change, different aspects	354
Symposium TuS10 – Women entrepreneurs and regional development, 2	358
Symposium TuS11 – Work, psychosocial factors and women's health at midlife	360
Symposium TuS12 – Gender sensitivity in occupational health; an issue	200
for life quality & work efficiency	364
Poster session TuP05 – Ergonomic physiological: exposures and health effects	336

Poster session TuP06 – Occupational health service activities and improvements	372
Workshop WeW01 – Psychosocial exposures – violence and sexual harassment	378
Workshop WeW02 – Work and family life balance: Total burden	383
Workshop WeW03 – Occupational health and safety, working conditions & environment	386
Workshop WeW04 – Improvement of working conditions	390
Workshop WeW05 – Agents and activist for change: Unions	396
Symposium WeS01 – Tools and methods for making equal pay realistic and value-adding	401
Symposium WeS02 – The total workload of women and men	
in a cross-cultural perspective	405
Symposium WeS03 – Strategies for change – an African example	410
Symposium WeS04 – Health, work and reproductive rights	411
Symposium WeS05 – Strategies for the prevention of gender originated	
differences in exposure	416
Symposium WeS06 – Class and Gender	418
Index	421

SUW01: Globalisation, the Gender Division and the Labour Market Transformation, 1

SUW01:1 Woman's Present, another Woman's Poison

Gwen Curtis Cornell University, USA

Abstract – The cut-flower industry has increased dramatically during the last three decades. Production has moved to Colombia and the African continent to pursue the advantages of climate, lower input costs, fewer regulations, and cheaper labor. Women make up three-fourths of the labor force, but their health concerns have not greatly influenced changes in the industry. Social and environmental justice issues have not been a priority of the industry, primarily due to the competitive market for a highly perishable product. Markets continue to expand with advancements in technology and air travel. However, European consumers now demand pesticide-free flowers, and pushed for a "green" label (e.g., Florverde, etc.). In addition, the Montreal Protocol currently demands alternatives to soil fumigants such as methyl bromide in developed countries, with a scheduled phase-out in Third-World Countries over the next 10 years. It is unclear if these changes will improve living conditions for people involved in cut-flower production. If consumers are to continue enjoy buying flowers, which are grown environmentally and socially respectable, the industry will be pushed to develop alternatives to chemicals and higher labor standards.

SUW01:2Women at the labour Market in India since 1990

Nivedita Das Kundu Jahawaharial Nehru Univeristy, India

In India with the process of liberalisation, structural adjustment policies, Globalisation in vogue in the later quarter of the twentieth Century, there was no real radical break observed in the labour market between pre and post reform period. Though in certain sectors labour power of women workers were in demand again but the new economic policies instead of breaking down the on going traditional trends, aggravated them to the further deterioration of women's economic, social and health conditions. The policies of liberalisation, SAP, have brought very little changes in the role and status of the vast majority of women work force in India in last decade. Rather, they became subjected to different kinds of economic & sexual exploitation and severe discrimination in the labour market.

The working conditions of women in most of the sectors are still seen as very poor, unhealthy and exploitative. Employer's, in spite of their profit from their production, are not bothered to improve the working condition. In many places even today, workers are seen working in a very unhygienic, unsafe condition, where even the place of work is very poorly lighted up with poor ventilation facility or having machines which are known to cause accidents. But, employers invest as minimum as possible because without much investment also they get ample of workers easily. In many work places women were seen working sitting or standing continuously for 7-10 hrs. in a same posture minimum 6 days a week with maximum of half an hour lunch break in-between. They

are even restricted to use toilets for more than stipulated time or move from their place of work. Women in these work places have complains of severe backache or other perennial body pains. Mainly unmarried women are preferred in every industry and if women become pregnant they are retrenched from the work place in some pretext or other. Most of the sectors do not provide even basic medical facilities. Many women workers are found anaemic patient with severe vitamin deficiency. In certain sectors where women workers are in majority like in Garment manufacturing units, Gem Units, Cigarette or Beedi factories, Wig producing factories, Agarbatti (scented sticks) factories where the job involves hazardous work, even there no protection measures are taken (like the use of masks or exhaust fans in the work place, regular health check up camps etc). So, in these units breathing problems among female workers are very common. Many workers faint while working and become victims of various communicable diseases. Thus, hardly any positive changes were visible for the women workers. Women stand as one of the most exploited ones in the labour market in India even after the introduction of various reform policies. Women are still seen as balancing force in the family or in the national economy, which makes them difficult to become integrated as a permanent part of the work force and susceptible to unscrupulous or discriminatory treatment in the employment market.

SUW01:3 Filipino Domestic Workers in Hong Kong: Highlighting Issues of Health, Immigration, Gender and Work

Eleanor Holroyd, Alex Molassiotis; Ruth Taylor-Piliae Department of Nursing, Chinese University of Hongkong

Immigrant domestic helpers in all countries, which employ their services, are almost universally women who work long and erratic hours, for low wages and limited benefits. The health needs of Hong Kong's (HK) Filipino domestic workers have yet to receive attention despite the key role they play in Hong Kong economy. This paper will provide baseline data on the health-related behaviours, in a cross sectional survey of 290 Filipino domestic workers residing in Hong Kong. Specific health related behaviours measured included mental health symptoms, knowledge of disease causation, health locus of control and social support. The top four ranking items of symptom experience included waking in the early hours, loneliness, worry and taking a long time to get to sleep. In respect to knowledge of illness related factors; misconceptions were evident regarding the causes of mental illness and factors predisposing cancer. Women surveyed had an average of ten people proving social support including families, friends and religious contacts. The source of reinforcement for health related behaviours was either a matter of fate or influenced by powerful others. The conclusion highlights that Hong Kong's immigrant Filipino domestic workers may not present themselves for healthcare due to culturally specific beliefs and structural barriers such as the cost of health care and the need to take time off employment resulting in poor health outcomes and under utilization of services.

SUW01:4 Maquiladora work: Ideal work for the women? The Mexican case

Cirila Quintero Ramírez El Colegio de la Frontera Norte, Dirección Regional de Matamoros

This paper analyzes the participation of women in the maquiladora industry (companies of foreign ownership in developing countries). Especially, discusses the hypothesis about the predilection of the women to this industry and the assumption that this work is ideal for the women, due to the nature of the work, unskilled, and precarious labour conditions. However this is a partial explanation, the Mexican case, with four decades of evolution, and a diminution of women in its labour force in the last times, shows that the preference also is related with other factors: first, with the type of the industry maquiladora in each region (industrial sector and level of the technological development); second, with local characteristics of the labour market of the cities with maquiladora (when the maquiladora has a more width market in where could to get the same profits of the women or men, the supposed women's suitability the maquiladora work disappears). In other words, the paper tries to examine how the predilection of the women for maquiladora is more related with a determined stage of the maquiladora in developing countries that a common pattern of this industry.

Methodology. The study is based in the analysis of two Mexican cities with longer trajectory of maquiladoras: Matamoros in the East of North Mexico and Tijuana in the East of North Mexico. The paper makes an historical and sociological analysis about how has changed the employment of the women in this industry during four decades; trying to show how it has been more related with the type of maquiladora industry and local characteristics of labour market than special nature of work in maquiladora. To the analysis the paper uses primary and secondary sources, such as theoretical and empirical literature revision about the issue, periodical revision of local newspapers, statistics about maquiladora and employment of women, interviews with managers, governmental and some interviews with women in the first maquiladoras and women workers in the present maquiladoras in Matamoros and Ciudad Juárez.

SUW02: New Labour Market Trends, Historical and Cultural Aspects

SUW02:1 Labor And Life Conditions Amongst The Women Working In Different Types Of Labor

Dilber Demir

Türkikye Haber-is Sendikasi, Ankara, Turkey

Participation of women of the labor force in Turkey has gained momentum trough the upgrading of the education levels of the Turkish women after the Republican era. Although the equality of sexes between women and men appears to have been achieved on legal ground, participation of the women to the work life is relatively lower than men due to the social, cultural and economic hurdles.

When we inquire into the point where the women are predominantly employed and evaluate the data we acquired from this study; the emerging table shows us that women work-force has yielded to the patriarchal structure and male-domination. The role meted out to women by the society is placed within the mind-sets based on sexuality in an effort to eliminate the socio- economic deficiencies within the framework of socio-cultural developmental patterns. The section who tries to excel is observed to be the women who has generally undergone higher education.

Work Status of the Employed Work-Force

Worls Status	of the	Employed	Work-Force
WORK STATUS	or the	Employed	work-Force

Work Status	Women	Men	Total
Wage-earner or Salaried Employees	19.2	37.6	31.7
Daily Wage Earner (Seasonal, Accidental,	3.4	8.4	6.8
Provisional			
Employer	0.3	8.1	5.7
Self-employed	10.2	31.5	24.8
Gratuitous Family Worker	66.9	14.5	31.0
Total	100.0	100.0	100.0

According to the data obtained in 1998; the participation of the men to the work-force was rated to be 69.5 percent while the same ratio for the women was 27.9 percent. From the perspective of the work-status of the employed labor force; the ratio of the wage-earner compared to the overall employment are too low in our country while the self-employed and gratuitous family workers predominate.

A number of projects are being developed to ensure equality of sexes between women and men and incorporate the women to the public work-force and laws are amended radically to this end. The project of upgrading the employment of women has been put into application under name "Employment and Education Project" initiated on April 5, 1994.

MAIN TARGETS

- Improving the efficiency by diversifying the employment services.
- Employing the jobless and unskilled work-force in productive works

- Evaluating of the statistical data oriented to work-force market
- Developing policies in an effort to uncover and eliminate the hurdles barring women to be employed. From a historical perspective; creating employment seems to be considered not as an ultimate aim per se by those at the helm of Turkish economy but it is handled only as a corollary of economic growth.

References: (K.S.S.G. Kadin Istihdai ve Perspektifler), Employment of women and perspectives Prime Ministry Family Research Institution Senar ESER – Science Series 98

Historical particularities in the birth of the welfare in Italy, 1900-1940. The services for maternity and infancy in the industries of the Tobaccos Manufactures.

Francesca Vardeu National Sanitary Service, Italy

In the first years of the year1900 Italy occupied the fourth place among the European Nations for the use of the female job in the industry (De Grazia, 1997). The institution of the Cassa di Maternità in 1902 showed limits of application and long times of realization (Buttafuoco, 1985). The first laws for the protection of maternity in the working places and the proposal of nursing rooms in the factories that occupied more than 50 workers appeared only in the year 1907. Similar dispositions were not or only partially and lately given to rural workers and tertiary employers. In those years similar services were conceived and organized from volunteers, mostly physicians or women of elevated social extraction, in the popular districts of several Italian cities. These services had a prevailing relief character. For the extension and the modernity of the treated themes, it is noteworthy the philanthropic activity developed by the secular emancipazionistes, which actively pursued not only the mere assistance, but also the extension of the civil rights to the working mothers and children. Serious delays are signaled in the extension of civil rights to infancy. Only in the year 1913 the maternal recognition of the birth was made mandatory. In the years 1901-05 in Italy 167.41 children every 1000 born alive died in the first year of life, whereas in the United Kingdom children mortality accounted for 134,95 and in Sweden 79,87 deaths.

Since the first half of the 1800 century, the Tobaccos Manufactures were among the first factories in Italy to employ female workers in every step of the working process. The women presence in the Tobaccos Manufactures, located all over the national territory, was very high. In the year 1879 the percentage of women employed was 88% of the whole personnel. Up to the year 1905 the Tobaccos Manufactures were allowed to enroll children younger than 15 years of age. Since the first years of the 1900 century, numerous sources (Pieroni Bortolotti, 1960; Nava, 1986; Angeli Castrovilli Seminara, 1999) reported on the strong women activity in the Manufactures aimed at recognition of the human rights in the working place. The greatest part of them had a contract on a piece work basis and were paid less than the male colleagues. In the year 1908 a nursing room called "incunabolo" was established in the Tobaccos Manufactures in Turin (Angeli and others, cit.). We think that, differently from many other private, commercial or rural industries, this structure had widespread diffusion among the Tobaccos Manufactures in the whole national territory. In 1925 the fascist government federated the numerous existing private or of the state institutions to a national service for maternity and infancy, called ONMI, risen with the purpose of demografic increase and race protection. For this reason maternal breast-feeding was considered "obligatory". The Tobaccos Manufactures were quoted from the fascist regime for their efficiency and taken as a model

extending the same rules to the nursing rooms created by the liberal government in the first years of the 1900-century. In the year 1927 kindergarten and nursing room (Sale Materne) were gradually established in the factories with more than 50 workers. In the 20thies the burden of these structures was charged on the industries and the presence of the service for the women workers and its operation was considered by the maximum exponents of the regime "essentially a problem of syndical value." Sanctions were threatened to defaulter industrials (it is unknown if they were ever applied). In the 20thies the fascist regime never considered Olga Modigliani Flaschel proposals for a less expensive but more realistic better realization of the service. In the late 30thies investigations conducted from sanitary inspectors in the factories with prevailing female workers showed that in other factories the law was not or only partially applied. Many hygienic lacks were also reported. The birth and the keeping of the Sala Materna from the Tobaccos Manufactures remained an exception. Delays and welfarism characterized the birth of the welfare in Italy and the call for civil rights, especially for maternity laws. Deep and appropriate evaluations are needed to evaluate moral aspects with which the fascist regime, preparing the services, interpreted also the demands of maternity and infancy in the period.

Women in Non-traditional Sawmill Work (1985 - 2000)

Alec Samuel Ostry, P.Demers, R. Hersbler, K. Teschke, C.Rertzman University of British Columbia, Canada

During the Second World War hundreds of women-obtained employment in sawmills in British Columbia as male workers left their jobs to join the military. On returning from the war, men reentered these sawmills largely, but not completely, replacing the women workers. While some women remained in sawmills through the 1950s and 1960s they were an unusual minority.

This began to shift in the late 1960s and in the boom of the 1970s when employment expanded in this sector. By the end of the 1970s, at the height of the economic boom, women made up 10% of the workforce in some sawmills. In the massive downsizing and restructuring which began in this sector in 1980 (and has continued unabated for the past 20 years) thousands of sawmill workers were laid off. Most of the women in these mills have been among those downsized although several hundred were hired, during these difficult times.

This is an investigation of the women who hired into sawmills during this difficult time of restructuring and downsizing. Because our database contains detailed job history information and some data on psychosocial exposures we will show who the women were who entered the sawmill labour market at this time, what jobs they were hired to fill, and occupational and psychosocial exposure trajectories over a 15 year time period.

The purpose of this investigation is to better understand women worker's role in a rapidly deindustrializing traditional male industry.

Women and the new Modalities of Labor: A View from Ukraine

Svitlana Taraban York University, Canada/Zaporozhye University, Ukraine

From its inception in 1991, the transition from a socialist to a market economy that followed the break-up of the Soviet Union had significant implications for the occupational status of Ukrainian women in the national labor market. The decrease of industrial output, the deepening economic stagnation of the public sector and the loss of social benefits forced Ukrainian women, who suddenly found themselves unemployed or underemployed, to rethink their symbolic and strategic positioning in the Ukrainian labor market.

In this paper I will explore the changes in the professional identities of Ukrainian women that occurred since the beginning of the reform period. I will demonstrate that maneuvering in an environment of economic uncertainty requires Ukrainian women to renegotiate their professional identities within the emerging free market discourse and to involve themselves in new types of economic activities. Specifically, the paper will analyze the phenomenon newly observed in Ukraine called the shuttle trade – a form of economic activity that is based on the small-scale importing of food items, clothes and other goods done by individual traders (known in Ukraine as 'chelnoki'). According to the statistics, in Ukraine women comprise 60-70 percent of the chelnoks.

Building on the literature that explores the Soviet gender contracts that had regulated women's public and private lives in the Soviet state, I shall argue that the present trend of the occupational multiplicity of Ukrainian women and their mass exodus from their pre-transition workplaces into the informal economy of the shuttle trade business can be viewed as a continuation of the shadow gender contract of the Soviet epoch. In brief, the shadow contract refers to the ways in which the state has negotiated the entrance of women into the public sphere. It emerged in response to the constant deficit of many goods and food items in the former Soviet Union. At the heart of the shadow contract is the complex and multifaceted system of the social networks that were invented by Soviet women in order to cope with the economy of the deficits. Since the well being of the family was solely a woman's responsibility in the Soviet state women had to learn the skills of *dostavanie* – knowledge on how to find things that are absent from the Soviet supermarkets and how to buy well and cheap. This task required women to be creative, resourceful, and active and to be able to navigate fluently in the economic realm of the Soviet empire.

Establishing the link between the new modalities of female labor that emerged in post-Soviet Ukraine and the informal networking system created by women during the Soviet period, I will show that the major shift has occurred at the level of women's involvement into the informal economy which is manifested by their abandonment of their previous occupations and their refashioning of the professional identities exclusively around the space of the informal economy. Even in the case when Ukrainian women remain in their – professional occupations, they still might be involved informally economy as a shuttle traders on a sporadic or seasonal basis (e.g., teachers during school vacations).

Although the phenomena of cross-border trade in not unique to Ukraine, the ways in which it fashions the new professional identities of Ukrainian women need to be investigated. I will conclude by addressing the popular now sentiment in the representational discourse that essentially portrays Ukrainian female shuttle traders *a la* Western businesswomen since their new professional occupation ostensibly give them a sense of empowerment, financial stability and economic independence.

SUW03: Gender and Socioeconomic Aspects of Inequality in Working Conditions

SUW03:2 The Health Problems of Working Women in Turkey: The Health Problems of "A Minority Group

Sevkat Bahar Özvaris, Ayse Akin. Cigdem Esin, Dept of Public Health Reasearch and Implementation Dr. Hacettepe University, Turkey

This study aims to examine the health problems of working women in Turkey by a gender point of view. Within this context, the reasons of the inequality and discrimination that working women face in Turkey where a most of the women are excluded from the workforce; a high percentage of working women are employed in low-paid positions; and where a great number of women perform unpaid domestic work or take place in informal sector with their domestic skills are reviewed first. Later, the health risks that working women in different sectors face are discussed by the existing data.

The percentage of women into workforce in Turkey is 29.7%. One third of them works as unpaid family worker. These percentages differentiate in rural and urban areas. The percentage of participation is 47.6% in rural areas whereas it is 15.8% in urban areas. Only 9.7% of working women are employed in industrial sector. On the other hand, 18.1% of women are employed in service sector. In the first part of the study, the working conditions of women in different sectors are examined while picturing the historical development of their participation into workforce in Republican period in Turkey. The literature review in this first part-made by a gender perspective-aims to highlight the gender differences in different sectors, the specific sectors where women are preferred to be employed due to their "traditional" gender roles in Turkey.

Although there are several studies about the working life of women in Turkey, there is not any sufficient study about the health conditions or health problems of working women -with or without gender perspective-. However, the health problems of working women are not evaluated apart from the gender inequalities. Therefore, this study aims to take an initial step, and conceptualizes the health problems of working women in Turkey under the following headings by using the existing data:

- The common health problems of working women that are not caused by the working conditions,
- The health problems specific to the main sectors where women are employed,
- The health problems directly caused by the working conditions (occupational diseases and work accidents),

The sentences and decisions of Ministry of Health specific to health conditions and work life whether women are included in them or not: whether non-governmental organizations, which work by a gender perspective, realize activities specific to the health conditions of working women or not are briefly discussed in the last part of the study

SUW03:3Environmental Hazards, Women's Work and Health in Rural Kutchch, Gujarat, India

Smita Mishra Panda Institute of Rural Management, (Irma) Anand Gujarat, India

Drought is a perennial problem in rural Kutchch in the Gujarat state of India, and village communities are constantly struggling under a declining resource base to feed themselves and their livestock. In Kutchch district 7 out of the 9 talukas (administrative units) are identified as drought prone. Environmental degradation is severe and the indigenous grasslands have been completely devastated due to unchecked proliferation of a wood species "Prosopis Juliflora", increasing soil salinity, frequent droughts (2-3 times in every 5 year cycle) and overgrazing. Continuous erosion of natural resources has meant loss of viable sources of income such as collection and sale of minor forest produce by women, which served as a safety net during the summer months. There is largescale out-migration of men and cattle for fodder and subsistence. Women are invariably left behind in the villages to fend for themselves, their children, old and the sick and female-headed households is on the rise. With the steady erosion of primary household assets such as land and cattle, the rural population has come to depend more on traditional embroidery and handicrafts, mostly done by women. The livelihood strategies practiced by the Kutchch households are typical of a drought economy and impose multiple burdens on women. On an average, rural women have a 19 hour work schedule (3-4 hours of which is spent on collecting water for domestic use). Women's status in rural Kutcheh is affected both on economic and health fronts. Drought affects availability of 'protective foods' and micro-nutrients like Vitamin A, Iron and Folic Acid. Further, water fetching takes a severe toll on women's health and affects pregnant women. Outbreaks of Gastro-enteritis, Typhoid and Hepatitis are commonly found in rural Kutchch. Gender discrimination in health care is also commonly found.

In the wake of the recent earthquake (January, 2001), women have been overburdened on multiple fronts. Loss of livelihood has been aggravated with destruction of houses including worksheds and looms, death of spouses, children and other kin members, and livestock. Further, the disaster has affected marketing of traditional embroidery and handicrafts. Even after the initial relief months, people are struggling to construct their houses and restore livelihoods (through external agencies like NGOs and the Government). Women do not have space to do embroidery or handicrafts, which affects their income earning. Men go out for work and women are by and large confined to their home as they find it difficult to leave their belongings out in the open. Regular health interventions by NGOs have been postponed which has affected women in the rural areas as they find it extremely difficult to visit a government health care center due to far flung nature of the villages.

This paper would explore the links between women's work and health in the context of drought and disaster. There are several issues that are important to consider. They are water scarcity, environmental degradation, food security, women's work and their contribution to household survival, gender relations, health of women and children. The role of the relief and rehabilitation agencies in addressing women's health and income earning opportunities will also be highlighted. Field study in Bhuj rural areas of Kutchch district, that was severely affected by the earthquake, has been conducted for the study. Participatory approaches have been used for the study at the community level.

SUW03:4 The Inequality in Working Conditions and Health of Russian and Finn Women

Irina Zhuravleva Institute of Sociology Russian Academy of Sciences

Introduction. The aim of the comparative inquiry in Moscow (545 respondents) and in Helsinki (824) was to study health perception, conditions of work and health and factors of health behaviour.*Method*. The dates were collected by mail questionnaires from random samples of the 18-64 year-old citizens.

Results. The state of health of Russians and Finn women is very different: 59% Finns consider their health "good" and "very good" that is 7 times much in comparison with Russians. While "bad" and "very bad" called health 7% Finns and 34% Russian women. The most of Russians (60%) value their health as "normal" in compare with 33% of Finns. The respondents were asked to value their work with point of view strenuous physically, mentally and harmfully. The Russians generally experienced their work as more strenuous physically – 43% Russian women assessed their work as "quite and very strenuous", the Finns corresponding figures are 1,4 times less.

The analogous situation is with the value of strenuous mentally and harmfully work. Two thirds of Russians held their work as "very" and "quite stressing" mentally, while in Helsinki these shares half of women-respondents. The most distressed groups in this sense in Helsinki and Moscow were 30-39-year-old women, of whom 63% and 73% accordingly considered their work "very" and "quite stressing". Among Russian women the correlation was significant (.13*), among Finish women – .18***. The Russian women were also more often of the opinion that their work is harmful to their health: 63% considered their work to some extent harmful, while in Finland such evaluations were made by 38% of women.

Education did not seem to make much difference in considering work stress and harmful but there is a correlation the education with physical strenuousness of work.

Conclusions. Russian women experienced more stress them the respondents in Finland in most areas. The high level of strain is created. Besides the physical and mental work stress and harmfulness of work, as well as by several health measures (perceived health, chronic morbidity, health worry, fitness). Extra stress experienced by the Russians could be read out impairment of economic and ecological situation, increase of interpersonal conflicts.

The gender differences, which were prevalent in Moscow, were smaller in Helsinki. Such indicators point to a greater gender gap in Moscow and a more traditional woman's role.

SUW04: Occupational Exposure-Vibrations

SUW04: 3 Women injured by hand-arm vibration

Sonya Hörnqwist Bylund, Lage Burström, Anders Knutsson National Institute for Working Life, Umeå, Sweden

Background

Half of the working population in Sweden is women. There is little knowledge available about women and occupational diseases.

The use of hand-held vibrating tools can cause vascular, neurological, muscular, and skeletal symptoms or disorders.

Objectives

The objectives of this study were to investigate what symptoms the vibration-injured women suffer from, in which professions the injuries occur, the prognosis for the injured women, and after how long a period of exposure the symptoms appear.

Methods

The investigation was based on a study of 374 women in Sweden, who had reported an injury due to hand-arm vibration to the Social Insurance Office and/or had received financial compensation from the Swedish Labor Market Insurance during 1988-1997. Information on e.g. self-rated health symptoms, vibration exposure, current work situation and individual factors was collected by means of a questionnaire.

Results

The prevalence of numbness at the time of reporting the injury was 91%, and the prevalence of white fingers was reported by 54%. On average the first symptoms started after seven years of exposure and the first visit to a doctor took place after 10 years. Neurological symptoms developed after a shorter period of exposure compared to vascular symptoms.

The occupational group with the highest prevalence of reported vibration injuries was dental technicians.

Two thirds of the women had stopped using vibrating machines in their work. Among the women who suffered from white fingers when they reported the injury 50% declared impairment or no improvement of the symptoms. Every fifth woman was retired and the same number of women had retrained due to the injury.

Conclusion

Two thirds of the women had stopped using vibrating machines. Dental technicians had the highest prevalence of vibration injuries.

SUW04: 4 Working Conditions, Ecology, Social Environment: Influence on Women's and Men's Health

H. Meshkova H., Institute of Sociology Russian Academy of Sciences L. Alm Karolinska Institute, Stockholm, Sweden

Modern concepts and practice of ecoanalytical control are based on the study of quality(separate typical factors) and quantity(level of pollution) characteristics of the environment at the place where a person works and at the residential area on principle of sanitary norms.

The environmentalism in Sweden since 80-s aquired in its development a new character: towards green politics (A.Jamison, et.al."The Making of New Environmentalism").

In Russia the state of environment ranked as the 7th important among the problems that were considered as the most urgent by public mood. There emerged dangerous health trend in Russia. Average male life expectancy dropped to 59 years. Once stalled infectious diseases have reemerged and spread(TB). Women and youth in Russia are the new targets of tobacco giants. At the same time a market for beauty and fitness services - new to Russians - is being established.

Some global changes in life-styles, for example, the advent of fast food was aquired and now is being critisized by experts and beginning with the mid-80-s a trend started towards reducing the amount and nutritive value of food. The systematic approach allows to find out zones of ecological risks in industrial and residential areas, assess the degree of their influence on health condition of people and thus help to work out effective measures on prevention of ecological violence.

SUW05: Health Related to Gender and Class Aspects, 1

SUW05:1The Situation of Health, Accidents and Diseases Among Female Farmers in Vietnam

Nguyen Thi Hong Tu Department of Preventive Medicine, Ministry of Health)

Vietnam is an agricultural country. Approximately 80% of population are involved in agricultural production. The female labour force account for 51,4% of total country labour force, in which 72% work in agriculture.

A cross sectional study was carried out by questionnaires in 4746 female farmers at working age (18-55 years old) in 8 agricultural provinces representing three main regions (North, Central and South) of Vietnam in order to assess the situation of health, accidents and diseases of female farmers and to develop a health care model and to give recommendations on policies for female farmers in rural areas.

The results of investigation showed that the investigated female farmers are in the ages of 26-45 years old (72,7%), with educational level of primary and secondary school (84.9%). They were married (88.8%). Their jobs were cultivation of rice and industrial plants (74.8-80%). The poor living conditions and working conditions including many risk factors such as working in open air, physical workload, exposure to agricultural chemicals...affect significantly on female farmers' health. Almost of them (80.5%) were not examined their health annually. The female farmers who sprayed pesticides had some signs and symptoms of pesticide poisoning such as headache (98.4%), dizziness (66.4%), insomnia (31.3%), skin itching (22.9%), hand numbness (24.1%)...And they treated by themselves by taking drugs and drinking orange and lemon juice. The rate of female farmers suffering from diseases and admitted to the Health Centre at Commune and District Hospital was 35.6%, in which respiratory diseases account for 9.3%, gynecological disease: 5.3%; muscle-articulation diseases: 6.1%; sciatic nerve pain: 4,6%; 17 cases of tumors and two cases of tuberculosis. The number of accident in the year 2000 is 60 cases, constituted 1.3% (130 cases/10,000 people), in which accidents at work accounted for 58.3% and traffic accidents: 30%. This number was higher by 5 times than that reported at district level (25 accidents/10,000 people) and by 20 times than that reported at commune level (5.3 accidents/10,000 people). The number of miscarried female farmers were 575 (constituted 12.1%), in which 42.3% of them assumed that the miscarriage was due to physical workload in agriculture.

The authors suggested that a close inter-sector collaboration should be established between concerning ministries such as Ministry of labour, Invalid & Social Affairs, Ministry of Health, General Labour Federation, Vietnam Women Association, Farmer Association,... and Local Government (Commune People Committee) in health care for farmers in general and for female farmers in particular. The knowledge on control and prevention of hazards in agriculture for medical staffs at grass root level should be improved to take care farmers' health more effectively. Health education and training should be strengthened on occupational health and safety in agricultural work and health prevention and protection for rural people.

SUW05:3 The The Influence of Socioeconomic Factors and Employment Status on Women's Mental Health and Health Behaviour

Csilla T: Csoboth, Maria S. Kopp, Emma Birkás, Sándor Szedmák Semmelweis University, Budapest, Hungary

Low level of education and employment status and unsatisfactory marital status can lead to increased physical complaints and depressive symptoms in women, which in turn can cause the emergence of negative coping methods, i.e. excess alcohol consumption, overeating, smoking and drug abuse. In our paper we will present those socioeconomic and employment status variables which were found to be most closely connected with mental and physical health.

The presentation is based on a national representative study of the Hungarian population by age, sex and place of residence, which was conducted in 1995. The data analysis aimed to assess the socioeconomic and health condition of the female population. The survey, conducted in the form of personal home interviews, included more than 9.800 women between the ages of 16-70. The population was selected by stratified and multistep sampling. The questionnaire contained 500 questions regarding sociodemographic data, mental and physical health, and health behaviour.

Low level of education, employment of lower status or being unemployed showed a close connection with depressive symptoms. Those women who were not working or were unskilled labourer showed an average score of 10.6 on the Beck Depression Inventory (BDI) scale, compared to working professional women (5.0 BDI). 11.6% of women not working and 7.5% of unskilled labourers were severely depressed. A high Body Mass Index, increased alcohol consumption, and smoking were prevalent among those with lower education.

The low status in society of those women who are unemployed or working under unsuitable working conditions causes reduction of self-esteem and may lead to depressive symptoms. Women with low levels of education who are only able to fill monotonous, unenjoyable jobs become bored from repetitive tasks and suffer from greater mental stress than those who are professional working women. Health behaviour is influenced by the mental wellbeing, which

Is influenced by socioeconomic conditions and employment status, therefore increasing the number of educated women and improving their working conditions would positively influence the mental health of the female population.

SUW05:4 The Job Performance In Secretaries Undergoing Their Climacteric Period. Concepción, 2001.2

Alide Salazar Molina, Tatania Paravic Klijn) University of Concepcion, Chile

Descriptive, prospective and correlational study, in which the main purpose is to know the general perception of the job performance of women between 45 to 55 years old working as secretaries in a University in a south city in Chile. This study contemplates the knowledge about the self-perception and that of their superior concerning their job performance as well as the existing correlation between these perceptions and the climacteric symphtomatology.

A free access specific questionnaire "menopause life quality" created by the University of Toronto and adapted by the PROSAM foundation for its application in Chile is being used for data

recollection. We are also using the Procidano & Heller social support scale, modified by the authors. Additionally we are using scales for measuring the job performance perception created by the author and validated by experts and questions related with biodemographic variables and life habits. Descriptive and Inference statics are being use for processing the information.

From this investigation on, a valuable information is gathered, in relation to the factors which apparently are affecting the job performance of women who are going through this period of the vital cycle. Considering the progressive inclusion and presence the middle age women have in the laboral market, it turns out to be vital upon the equity at work environment, the knowledge concerning this stage for women going through climacteric.

SUW05:5 The Stress in Italian working women

Silvana Salerno, Maria Giuseppina Bosco, Irene Figa' Talamanca ENEA Casaccia, Environmental and Bio-medicine Division, Azienda Sanitaria Roma B – Servizio di Prevenzione Igiene e Sicurezza nei luoghi di lavoro (public occupational health service)

Aims

Italian women have one of the best world wide life expectancy (81.3 years old). They can better cope with environmental stress than men but their quality of life is affected. Employed women in Italy are 7.533.000 in 20.692.000 total employees (ISTAT, 1999). They are employed in textile, clothing, shoes, food, pharmaceutical and tile sectors, in teaching, nursing professions and in services such us dry-cleaning, cleaning, hairdresser, etc.

The aim of this paper is to review published and grey literature in order to assess psychosocial stressful working conditions in italian working women in order to discuss prevention priorities.

Methods

We have collected and analyzed the main last decade-published literature concerning job stress in Italian women with particular attention on psychosocial aspects. We have also looked over the main grey literature produced by public and private occupational health services.

Results

Italian working women mostly perform technical actions caracterized by *monotony and repetitiveness of simple tasks requiring attention*. They face the same risk condition in domestic activities either professional or not. *Hectic work* is a stressful work condition among Italian women. They mostly work on high demand and low control jobs, claim more *mental fatigue, dissatisfaction, responsibility, psychosocial violence (mobbing) and low paid work*. The prevalence of Italian studies on women upper extremity musculoskeletal disorders confirms this risk condition although the related mental aspects are ignored. The main reasons for this situation are discussed.

References

Kauppinen K, Kandolin Irja (1998) *Gender and working conditions in the European Union*. European Foundation for the Improvement of Living and Working Conditions.

Italian National Institute of Health – Proceedings of the *Workshop (2000) "Women and health: environmental and occupational risk prevention"*. Rome, 4-6 dicembre 2000. Technical Report (in print)

SUW05:6 The Psychological distress in different patterns of changed work and living conditions

Annika Härenstam, National Institute for Working Life and Department of Public Health Sciences, Karolinska Institutet, both Stockholm, Sweden.

Patrik Schéele, Department of Occupational Health, Community Medicine, Stockholm, Sweden.

Psychological distress and depression have been shown to be more frequent among women than men in most studies and different explanations have been proposed.

Aim: To investigate whether gender differences in psychological distress can be explained by contextual factors such as different patterns of changed work and living conditions during the 1990's.

Material and methods: A randomly selected sample of employed women and men in the Stockholm area (n=1214), responded twice a public health survey with an interval of four years. Patterns of working and living conditions were identified by means of cluster analyses of variables assessing a variety of exposures (psychosocial and ergonomic working conditions, domestic work, work/family balance, leisure activities and hours of paid work). Cluster analyses were performed on data from the 1994 and 1998 surveys respectively. Typical flows between clusters from the two analyses were identified and compared. Logistic regressions were performed with psychological distress according to the General Health Questionnaire (GHQ12) as the outcome. In the first model, 19 significantly typical patterns of changed work and living conditions between 1994 and 1998 were compared. In the second model, psychological health at the first occasion (1994 survey) was adjusted for.

Results: Psychological distress was more common among women than men in the total study group. Women were more often than men found in patterns of changed work and living conditions characterised by deteriorated working conditions. The opposite was found regarding improved conditions. The odds ratios for psychological distress varied between 4,7 for the worst and 0,1 for the best pattern compared to the average (OR 3,7 and 0,1 respectively when health state four years earlier was adjusted for) and gender had no significant effect on the results.

Conclusions: When contextual factors are taken into account, there seem to be no gender difference with regard to psychological distress. Higher prevalence of psychological distress among women might be explained by different conditions and development processes in segments of the labour market. Women are more often working in segments of the labour market with a negative development such as in the service and welfare sectors.

SUS01: Gender, the Welfare State and Health

Chair: Anne Hammarström

SUS01:1 Gender the welfare State and Health

Anne Hammarström Umeå University, Sweden

This symposium will focus on gender, the welfare state and health. Empirical research will be presented and strategies for improvements will be discussed. Welfare could be regarded as individual resources with which the citizens can control their life circumstances. The welfare state - with its organisation of the care of children, sick and elderly, with its social security system (including parents' insurance, child allowances, study grant, social insurance, unemployment insurance, superannuation benefit etc.) as well as with its active labour market policy and regulation of the work environment -- is a fundamental prerequisite for women's liberation. The gender order in society contributes to a gendered division of power, resources and work, which the welfare state can partly compensate for. Despite the lack of research within the field, there is a common belief that the better the welfare state functions, the better is the health of the women in the country.

The Scandinavian Welfare State has been characterised as "women-friendly". Important factors of the "women-friendliness" are 1) policies to protect job rights during pregnancy

and motherhood, 2) welfare responsibilities that allow women to support families when marriages break up or neglect responsibility for children, 3) policies to promote good social care services for children, disabled and elderly. Women's greater vulnerability to the need for social provision and care services are still important premises for social policy in late modernity. Both the "inevitable dependency" connected to being cared for due to old age and disability and the "derived dependency" that so often accompanies informal caring for children and other dependent family members, are conditions of life that women come into more often than men. In addition, the great majority of the employed workers in the health and social care services of the welfare state are women. Professor Kari Wærness, University of Bergen, will in her speak discuss how a retrenchment of the Scandinavian welfare state might affect women's health and welfare both in their roles as clients, family members and as workers.

Although it is important to recognise the possible health promotive effect of the welfare state, it is also important to recognise its weaknesses as well as to discuss strategies for improvement. In this symposium several issues will be raised in relation to defining some important gendered problems within the welfare state as well as to discuss what could be done in order to improve women's health

One important aspect of the welfare state has to do with the organisation of the health care. Women are the main providers of care, whether the care is paid or not, institutional or home-based. Women are also the main recipients of care, especially among the elderly. Although women are involved in much of the daily decision-making about health care, they are much less visible among senior policy makers and managers. Professor Pat Armstrong, York University in Canada will raise the question about what consequences privatisation of health care may have for women as providers and patients, and the impact of the reforms on women's participation in the decision-making

process. The differences between the women, related to their physical, social, economic, cultural/racial locations and their age and sexual orientation, must be considered in assessing the consequences of reforms. Which women are affected, in what ways, by which reforms are central questions in this work.

Another organisational gendered welfare issue has to do with the hazardous work environment of health care work. The sick leave is high among the health care workers. Given that over 80 per cent of health care employees are women, given the tendency to see women's work as clean and safe and given the restricted definitions of injury, however, the sick-leave figures may understate the health impact of working in care delivery. Moreover, recent reforms and demographic changes have altered conditions in health care institutions, especially in long term care facilities, in ways that may well increase the risks. It is these two issues; namely the invisibility of hazards in women's health care work and the health impact of changes in long term care, that are the focus in professor Pat Armstrong's second paper. The objective is to help point to the gaps in knowledge about and recognition of the health hazards women face under changing conditions in long-term care.

Doctor Elizabeth Lloyd, University of Bristle, will raise the question about the well-being of careers. Although unpaid care work has become increasingly recognised, the careers occupy an ambiguous position as both consumers and providers of services. There is a need for a more comprehensive gendered framework in occupational health, in order to support the work of unpaid carers.

SUS01:2 Gender The Welfare State and Health

Kari Waerness University of Bergen, Norway

The Scandinavian Welfare State has been characterised as "woman-friendly". Important factors of the "woman-friendliness" are 1) policies to protect job rights during pregnancy and motherhood. 2) welfare responsibilities that allow women to support families when marriages break up or neglect responsibility for children. 3) policies to promote good social care services for children disabled and elderly: Women's greater vulnerability to the need for social provision and care service are still important premises for social policy in later modernity. Both the "inevitable dependency connected to being care for due to old age and disability and the "derived dependency" that so often accompanies informal caring for children and other dependent family members, are conditions of life that women come into more often than men. In addition, the great majority of the employed workers in the health and social care services of the welfare state are women. In my speak I will discuss how a retrenchment of the Scandinavian welfare state might affect women's health and welfare not in their roles a clients, family members and as workers.

SUS01:4 The Gendered Health Effects of Welfare States

Pat Armstrong York University, Canada

Welfare states are both varied and in transition. Their strategies not only involve protective legislation and the distribution of resources and services, but also the structuring of public and private sectors in the formal economy and of private households. These strategies have profound consequences for women's health and for differences among women in terms of their health. With a particular emphasis on Canada, this paper examines the changing effects of welfare states on women. It asks how women are effected and which women are effected in which ways.

In spite of notions about inevitability, globalization and changes in the Canadian state are about processes that result from actual decisions and practices rather than from forces beyond human control. Canadians still establish many of the conditions for work and for deciding how, when and where care is provided. In providing supports, benefits, services and regulations, or in not providing these, state practices establish the conditions for care in and outside the formal economy. The state plays a fundamental role in determining how political, material and symbolic resources are distributed and in mediating the distribution of these among markets, communities, households and individuals. Indeed, states are central in determining what is public and what is private in the formal

economy and what is private in the sense of being outside the formal economy. The benefits and negative consequences are unevenly distributed between women and men and among women. It is thus necessary not only to find out what the state and global forces do, but also to determine who benefits and how they benefit, if we are to figure out how to create good conditions for care. While there are powerful forces limiting our options, there are choices to be made. These choices can have important consequences for women and their work, and have to be considered in developing strategies for care.

The market mechanisms that have become so popular with governments have to be carefully scrutinized for their impact on the nature and distribution of both care and care work. We have to ask where, when, and under what conditions markets are appropriate and what their impact is on care. In spite of the popularity of market mechanisms, there is every reason to believe these mechanisms will change for the worse who gets what kind of care through paid services and the conditions under which providers work, while increasing inequality and sending more care to communities.

Like globalization, communities have a variety of meanings, including not-for-profit and for-profit organizations as well as friends and neighbours. When we talk about sending care to communities, we most often mean to families and, within families, to women. But sending care to the community may mean undermining those communities and does not necessarily mean more local participation or control. And it may mean little care. Without time, space, economic resources and other supports, all communities may be at risk, and innovation as well as participation stifled.

It is also necessary to examine the ways globalization, states, markets, communities and households penetrate and structure each other, each influencing how the others operate. While the period following World War Two was marked by increasingly clear distinctions between public and private sectors in the formal economy, between paid and unpaid work, between families and labour market employment, and between states and households, these distinctions have become increasingly blurred as we move into the new millennium. The blurring of the lines among these

sectors makes it more difficult to see the links and more difficult for women to draw boundaries, at the same time as more rigid lines are drawn in some areas in order to reduce public support. So it is important not only to see how these sectors influence each other but also to see how the ways they influence each other are changing over time and with place. Critical questions need to be asked about who pays for care and at what cost to which women. Funding and payment are about much more than the money and costs are about much more than payment. How payment is made, under what criteria for what care are issues that have significant consequences not only for access to care but also for caregiver costs.

Sus01:5 The Wellbeing of Carers

Liz Lloyd School for Policy Studies, University of Bristol

With particular emphasis on the British context, this paper will consider the development of the role of 'carer' during the late twentieth century and the changing position of unpaid carers within the whole range of health and social care provision.

Although unpaid carers have become increasingly recognised in policy terms as an essential element of this provision, they occupy an ambiguous position as both consumers and providers of services. Consequently there is no satisfactory framework for understanding their health and wellbeing or responding to their needs.

The paper considers the overlap between conditions of work for both paid and unpaid carers and argues that a gender-sensitivity approach to occupational health can be appropriately used

to support the work of unpaid cares. However, the dynamic and complex nature of the role requires poses particular challenges concerning personal autonomy, choice and control and the relationship between carers and those for whom they care.

CV

Dr Liz Loyd

Liz Loyd is a lecturer in the School for Policy Studies at the University of Bristol, UK. Her primary areas of teaching and research are community care and gerontology. She is engaged in on-going research on End of Life Care in Old Age (Lloyd 2000). Other areas of research include ageing and housing, the relationship between formal and informal care and policies on support for carers. She is a member of the Executive Committee Of the British Society of Gerontology.

SUS02: Restructuring Gender Division - Work and Family

Chair: Jan Ch Karlsson

SUS02:1 Restructing Gender Divisions – Work and Family

The theme of this symposium is changing gender relations in working life and family life. Are there signs of new gender relations or fundamental shifts in the gendered division of labour? Or is it so that what we see is just modifications of what we always have seen?

Rosemary Crompton focus on the growing individualism in "late modernity" and relates it to developments in both work and family. She discusses the argument that no real change has occurred and points to a substantial shift that has occurred in respect to gender relations and attitudes towards gender. It will be suggested that parallel developments within, and growing tensions between, employment and the family might be the source of "counter-movements" against the effects of economic liberalism.

Lisbeth Bekkengen the author of the second paper examines how women and men's use the right to paid parental leave. To understand the differences it's important to compare men's and women's conditions both in working life and in family life. The main difference between women and men is not the conditions on the workplace or the financial possibilities, but the fact that men have the freedom of choice whereas women have to adjust to the circumstances. Men can decide *if, when* and *for how long* they want to be on parental leave. Women take parental leave when the baby is born, and they can't negotiate and discuss *whether* they want to be on parental leave. The main mechanism is therefore how fatherhood and motherhood is socially constructed. The question of parental leave highlights three social structures: the relation between production (work) and reproduction (family), the relation of men and women to work and family and finally the gender relation.

During the 1990:s the Swedish public sector went through big reorganisations. The aim was to improve effectiveness and quality. In order to study the possible consequences of extensive cut-downs in the biggest women's occupation in the country, a case study was conducted. Liselotte Jakobsen presents the result of this case study in the third paper. The nurses were interviewed on two occasions. The first set of interviews showed that at this point of time, there was a considerable deterioration in terms of employment and the nurses were experiencing economic problems. When new interviews were carried out three and a half-year later, conditions within the public health sector had changed rather dramatically. Now the organisation was slimmed, it was troublesome to fill the new nurses posts and even assistant nurses were sometimes hard to find. Working conditions had improved, but they complained about heavy working pressure and the situation of the patients.

Is it suggested that the mechanisms behind the events in large parts could be understood as an interplay between the practices and ideologies of socio-structural life modes in modern western society.

SUS02:2 Restructuring Gender Divisions: Employment and the Family

Rosemary Crompton, City University London

In this paper, I will weave together two themes:

The first theme relates to sociological arguments relating to growing individualism in 'late modernity'. I see these debates as being associated with the turn to economic liberalism and its consequences. In employment, economic liberalism has been associated with the development of New Managerial Techniques, which include flexible working as well as the development of the 'entrepreneurial self' in the employment context. In the family, individualism has been associated with both family instability and falling birthrates.

The second theme relates to the consequence (in Europe, US and Australasia at any rate) of changes in gender relations and the gender division of labour following the impact of 'second wave' feminism. In particular, we will focus on arguments (from rather different quarters) there has been 'no real change' in the gender division of labour. That is, that as women still retain the major responsibility for caring work, and men are still dominant in the market sphere, there has been a modification rather than fundamental shift in the gender division of labour. (Crouch 1999, Castells 2000, Hakim 2000).

Both flexible employment, and family instability, will be critically examined. It will be suggested that perceived current 'instabilities' in both families and employment are not, in fact, novel phenomena in market capitalism. However, what is new as far as the current situation is concerned is the substantial normative shift that has taken place in respect of gender relations and attitudes towards gender.

A counter-argument will be developed in respect of the second theme. It will be suggested that parallel developments within, and the growing tensions between, employment and the family might be the source of 'counter-movements' (Polanyi 1957) against the effects of economic liberalism.

Crouch C 1999 *Social change in Western Europe* Oxford University Press, Oxford Castells M 2000 'Materials for an exploratory theory of the network society' *British Journal of Sociology* 51 1 4-24

Hakim C Work-Lifestyle Choices in the 21st Century: Preference Theory Oxford University Press, Oxford 2000

Polanyi, K. (1957) The Great Transformation Boston Beacon Press

SUS02:3 Equal Rights, different Practices – The Gendered Parental Leave in Sweden

Lisbeth Bekkengen Sweden

In Sweden fathers and mothers have had the equal and statutory right to take paid parental leave since 1974. But men don't use their rights to the same extent as women do, and both parental leave and parenthood still are the responsibilities of women. If the purpose is to understand why women – but not men – use the rights it's important to compare men's and women's conditions both in working life and in family life. The main difference between men and women is not the conditions

on the workplace or the financial possibilities, but the fact that men have the freedom of choice whereas women have to adjust to the circumstances. Women as well as men can have problems on the workplace, but the problems become obstacles only when it exist several alternatives. Men can decide *if, when* and *for how long* they want to be on parental leave. Women take parental leave when the baby is born, and they can't negotiate and discuss *whether* they want to be on parental leave. If women should do so they would – in opposite to men – be regarded as bad parents. The main mechanism is therefore how fatherhood and motherhood is socially constructed.

The question of parental leave highlights three social structures: the relation between production (work) and reproduction (family), the relation of men and women to work and family and finally the gender relation. In the interaction between these structures women become "parents" whereas men are "daddies". This means that women have responsibilities in both the working life and the family life, both as parent and as employed. As employed men as well have responsibilities in working life, but in family life – and parenthood – men have rights, rights to take an active part in the parenthood or they can show a lack of commitment. The differences *between men* could be described as whether they have a "children oriented masculinity". This masculinity could exist on the discourse level only, but men who turn the "children oriented masculinity" into practice as well seem to take parental leave independent of the circumstances, if parental leave correspond with their own wishes and needs. Men with "children oriented masculinity" are not necessary equal men, because this masculinity highlights primarily men's relationship to children, not the gender relation.

SUS02:4 Life Modes and Gender in the Swedish Public Health Sector

Liselotte Jakobsen Karlstad University

During the 1990:s the Swedish public sector went through big reorganisations. The aim was to improve effectiveness and quality. Money should be saved through cut downs in staff, at the same time, as the level of qualification among remaining staff should be raised. This meant that many assistant nurses were given notice, and that assistant nurse's jobs were transformed into nurse's jobs. As a result, approximately 2/3 of assistant nurses lost their jobs, entirely or partially. In order to study the possible consequences of such extensive cut-downs in the biggest women's occupation in the country, a case study was conducted. Twenty assistant nurses, 18 women and two men, were followed up during a period ranging from about five to eight years from the notice to quit.

The nurses were interviewed at twice occasions. The first set of interviews showed that at this point of time, most of them were still working in their occupation in the public health sector, some times even at the same work place. However, part time employment and temporary employment had increased within the group; there was a considerable deterioration in terms of employment and the nurses were experiencing economic problems. The interviewees also felt that they had been badly treated by the employer, they were worried about the future and they expressed anxiety about the way the reorganisation had affected the situation of the patients. Yet the majority wanted to carry on within their occupation. A new job would call for education, and they did not think that they could afford or manage education, some of them because they had small children. Some could not think of anything else to do. But above all, and despite the recent negative experiences, they were almost all very happy with their work as assistant nurses. They believed that things would have to change.

Only one of them, a man, had left for another job. Three younger women had started various kinds of education, the other man and one more woman were thinking on doing so.

When new interviews were carried out three and a half-year later, conditions within the public health sector had changed rather dramatically. Now the organisation was slimmed, but at the same time it was beginning to be difficult to get enough personnel; it was troublesome to fill the new nurses posts and even assistant nurses were sometimes hard to find. The interviews showed that all the assistant nurses, who wanted to stay in their occupation, also had managed to do so. Further more they had improved their working conditions, most of them were permanently employed and most of them had achieved the working-hours they wanted. So far they felt satisfied, but they complained about heavy working pressure and the situation of the patients. Some of those who went through education were on their way back to the health sector, but now aiming at higher positions within the organisation.

In order to shed some light over what actually took place, and why it did so, in these processes, life mode analysis is put to use. Is it suggested that the mechanisms behind the events in large parts could be understood as an interplay between the practices and ideologies of sociostructural life modes in modern western society, in this particular case the worker life mode, the housewife life mode and the carrier life mode.

SUS03: Women, Work and European Union Enlargement

Chair: Ylva Ericsson

Organiser: Swedish Employment Service (AMS)

SUS03:1 Work Life and EU Enlargement: A Comprehensive Network Program: Women and Work.A Project directed towards the 13 countries applying for membership in EU

Ylva Ericsson Swedish National Labour Market Board

In the applicant countries a profound restructuring of the labour market is proceeding. Considering this it is very important to highlight the situation of women on the labour market and in working environment. Women are more vulnerable than men according to changes on the labour market due to historical reasons and traditional attitudes and also womens higher responsibility for the family and the domestic work. The overwhelming aim of the CNP project Women and Work is to facilitate and support the applicant countries to develop equality between women and men in accordance to EU directives.

The Treatment of Rome 1975 (Article 119) provided that men and women should get equal pay for equal work. The Treatment of Amsterdam creates an obligation to apply the principle of "equal pay for work of equal value" without discrimination based om sex. In addition the EU has adopted a number of Directives in order to implement the general principal of equal treatment in all member states. The CNP project will give active support to the applicant countries in their aim to implement the EU directives for Equality between women and men. The project will focus on benchmarking between the applicant countries as well as benchmarking between applicant countries and EU member states. The 13 countries have been invited to participate in the project and point out which issues they will prioritize for discussions in seminars and for benchmarking in other applicant countries or EU memberstates. Two seminars will be held in October 2002 in two different applicant countries. The themes of the seminars and the countries participating in each seminar will be dicided when the applicant countries have made their priorities. Three member states will also be invited to each seminar. An assessment conference will be held in October 2003. All countries which have choosen to participate in the project are invited to attend. The aim of the conference is to exchange experiences about the work which has been done in different countries since the seminars 2002. A final report will be elaborated. The CNP-project will be led by a group consisting of highly qualified academics and managers with practical experience from high level management, including former EU Commissioner Anita Gradin.

SuS04: Reactivity to laboratory challenge: How can we generalize to stressors in the field?

Chair Petra L. Klumb

SuS04:1 Physiological and emotional response to psychological stress provocation procedures in stress-related disorders in women

Ulrike Ehlert and Sandra Sieber University of Zurich, Switzerland

Stressors in humans induce emotional arousal which leads to physiological activation of the central nervous system, an increase of hormones of the hypothalamus-pituitary (HPA) axis, and coping reactions on the psychological and behavioral level. Depending on the type, intensity and duration of the stressor, on personal and psychosocial resources of the individual, stressful situations may provoke emotional and physical disturbances. These dysfunctions may result in stress-related disorders.

The integrity of the HPA axis can be evaluated with a variety of psychological, physiological and pharmacological paradigms. Hormonal responses are observed in real life situations or experimental laboratory stressors, which are appraised as being threatening or demanding without perceived resources for coping. Unlike naturally occurring stressors, laboratory stress provocation procedures allow the assessment of physiological stress reactions under standardized conditions. Commonly used procedures are video tapes, interviews referring to negative critical life events, the Stroop test, mental arithmetic, or speech tasks. In contrast to situations with high personal relevance, HPA activation can also be achieved without such ego-involvement through neuroendocrine challenge tests or by physical strain like treadmill exercise.

The onset and maintenance of a variety of psychiatric and psychosomatic disorders seem to be related to chronic or traumatic stress exposure. The assessment of clinical interviews in these patients confirm such relations. It can be hypothesized that chronic stress or traumatic experiences evoke dysregulations of neuroendocrine systems like the HPA axis. Due to prevalence rates of stress-related disorders it is well known that a high rate of females suffer from such complaints. For that reason we assessed psychological and endocrinological variables in a series of studies in women suffering from idiopathic chronic pelvic pain (study 1), in chronic fatigue syndrome patients (study 2), and in patients with irritable bowel syndrome (study 3). Besides the examination of unstimulated cortisol and ACTH levels all patients underwent pharmacological and psychological stress provocation procedures. In comparison to healthy controls all three groups of patients show characteristic dysregulations of the HPA which can be characterized by a reduced adrenocortical activity (hypocortisolism) and an increased feedback inhibition of the pituitary and adrenals. The results of this psychoendocrinolocial studies can be discussed with reference to the underlying mechanisms of the disorders.

SuS04:2 Gender differences in stress reactivity

Isabella Heuser

Department of Psychiatry, Benjamin-Franklin Hospital Free University Berlin

There seems to be general agreement that in everyday life, women react more strongly to stressors than men. It is not clear, however, whether this is a result of differential exposure or of differential reactivity. This issue can only be teased apart in the laboratory because here, it is possible to present a standardized environment. In a first step, we were interested in assessing, in men and women, the basal activity or "status" of the most important stress-regulating endocrine system, the hypothalamic-pituitary-adrenal (HPA) system. In order to achieve this, we performed the combined dexamethasone suppression/ CRH stimulation test (DEX/CRH) in 20 women and 20 men, all fifty and older. We found that women in comparison to men had significantly higher cortisol and ACTH respones. From that we conclude that women's basal reactivity is more pronounced than that of men. The implications for everyday life remain to be elucidated.

SuS04:3 Gender differences in cognitive, affective, and physiological reactions to the anticipation of a public speech

Petra L. Klumb , Christiane Hoppmann Public Health, TU Berlin

Observational studies of the effects of paid work on well-being suggest a beneficial effect of employment. Causal inference is not possible with this kind of evidence, however, because a range of alternative explanations cannot be ruled out. For this reason, laboratory experiments with welldefined challenges can be valuable complements of field research in the identification of intervening processes. Their value rests upon the assumption that responses in the laboratory reflect habitual reactivity. For generalizations to natural situations, a number of methodological issues have to be considered: (1) the ecological validity of the tasks and interventions, (2) the gender-specific validity of the tasks (e.g., differentials in prior experience resulting in differences in motivation and effort), (3) reliability of the criterion measurement, (4) temporal characteristics of the responses in question, and (5) modulating influence of time-varying contextual conditions. To investigate individual responses to laboratory challenge and their modulation by specific contexts, we modified an experiment by Kirschbaum et al. (1995). In this experiment, 30 female and 30 male undergraduates received either no social support, social support from a stranger of the opposite sex, or from their partner during the anticipation of the Trier Social Stress Test (TSST). For the present purpose, we (1) employed only the public speech part of the TSST, (2) repeated the experiment on consecutive days, and (3) used two stress modulating conditions (self expression, social support, and control).

SuS04:4 Coping style and sleep

Ursula Voss J.W. Goethe University Frankfurt am Main

The external validity of laboratory data is always a major concern when planning and conducting health-related investigations. One way to achieve external validity is by conducting studies in a laboratory setting and follow up with field studies. Another approach is to start off with a field study and try to determine cause and effect of the observed relationship in the laboratory. The advantage of this approach is that the experimental investigations focus on a truly existing phenomenon. The data we will present have been acquired in this latter fashion. Our field data show that In unusual and stressful situations, women have poorer sleep quality than men when confronted with a threatening situation, women have a stronger tendency to seek information (monitoring) compared to men. Men try to distract themselves more than women (blunting). In threatening situations, women experience a higher level of distress than men. In a follow-up study in our sleep laboratory, we found that information seeking is causally related to poor sleep quality. Regardless of gender, those participants scoring high in information seeking and low in distraction, were hardly able to sleep in the laboratory. Since women are stronger information seekers than men, they are more likely to suffer from insomnia.

SuS05: Sexual harassment is really a new name describing an old problem

Chair: Kaisa Kauppinen

SUS05: 1 Sexual harassment is really a new name describing an old problem

Kaisa Kauppinen Finnish Institute of Occupational Health

A good work environment requires not only elimination of health hazards, but also that health and well-being be actively promoted. More research and better statistics are needed to describe the new risks and psycho-social conditions faced by women at work. One such emerging risk factor is sexual harassment. There is a growing body of empirical research documenting the incidence of sexual harassment at work. In the European Union, 4% (3 million) women were subjected to sexual harassment at work during the year 2000.

Material and Methods: The author has collected through a variety of methods (e.g. standard questionnaires, expert interviews and focus groups) a rich data base documenting the existence of sexual harassment in different work settings, such as, police organisation, hospitals, academic institutions, prisons, UN peace keeping force, and high-tech industries.

Results: The consequences of unchallenged sexual harassment are to poison the organisational culture, both in the long term and on a daily basis. Sexual harassment creates an intimidating, hostile and unfriendly working atmosphere. Psychologically, sexual harassment results in anxiety, tension, irritability and other manifestations of stress at work. It leads to absenteeism, sick leave and reduced efficiency at work. Sexual harassment has a direct impact on a company's profitability as a result of lowered productivity, low morale and increased turnover.

Conclusions and Discussion: The prevention of harassment involves giving advice and consultation, as well as providing help for the affected person, mostly a woman. There is growing evidence to suggest that women experience quilt and self-blame over harassment. It is important to sensitise both men and women about behaviours and attitudes which have implications for harassment. Men have a central role in creating harassment-free workplace culture.

SUS05: 2 Sexual Harassment in Context

Meg A. Bond , Eileen Maloney University of Massachusetts Lowell

Sexual harassment is a serious problem for women in workplaces and academic institutions around the world. While much research has documented the existence of the problem, relatively little has been done to understand the importance of the context and general social ecology of the phenomenon.

Our presentation will focus on how graduate students at a mid-sized public university in the United States perceive and experience their academic environment, how this climate is related to the

incidence of sexual harassment, and the impact of the climate and the harassment on student's physical and mental health. The study assessed students' perceptions of attitudes inside their own academic department and for the University as a whole as well as the wide range of actual experiences with sexual harassment during graduate training. The study makes a unique contribution to both research and action by enhancing our understanding of how context and cultural values affect rates of sexual harassment and health outcomes. The paper will address potential areas for change aimed at building work and academic environments that confront sexual harassment and support women's positive health and professional development.

SUS05: 3 Dancing with discourses – female PhD-students understandings and strategies when dealing with experiences of sexual harassment

Gunilla Carstensen Uppsala Univerisity

Is sexual harassment a real problem or is it just something men harmlessly do to women in order to show appreciation? If sexual harassment is a problem, how does it differ from behaviours which are not characterized as problematic? These questions arouse from my interviews with 15 female PhD-students on how they understand sexual harassment. Officially in Sweden, sexual harassment is defined as all forms of unwanted sexual behaviour and advances. The informants in my study very much share this understanding when asked what sexual harassment is according to them. But when they talk about their own experiences of unwanted sexual advances and/or sexual behaviour they do not interpret these experiences in terms of sexual harassment. In my analysis it seems as if they elaborate with different understandings of sexual harassment. In my paper I discuss how the informants re-interpret sexual harassment when they talk out of own experiences. What do these processes of re-interpretation tell us about cultural codes of heterosexual interaction and cultural norms of gender and heterosexuality?

SUS05: 4 The Medicalisation of sexual harassment complaints: sexual harassment viewed as a work accident

Katherine Lippel Université du Québec à Montréal

Under workers' compensation law in Québec, psychological illness attributable to workplace stress is considered to be compensable as a work accident; disability arising from the injury is subject to compensation by the Commission de la santé et de la sécurité du travail, the local workers' compensation board. In Québec, as in other North American jurisdictions, workers' compensation law is based on a no-fault system: compensation is available regardless of issues of blame, however in those cases where someone is at fault, the worker is legally precluded from suing the employer or work colleagues for monetary damages resulting from a work accident.

Harassment at work is considered to be one of those stressful situations that can lead to disability. Under workers' compensation law the reasons for the harassment are irrelevant. Psychological or physical injury caused by sexual harassment in the workplace is thus a work injury

covered by the workers' compensation scheme. The discriminatory nature of the harassment is not addressed in the context of workers' compensation, and the gravity of the behaviour of the aggressor will not influence the economic outcome of a claim, which is exclusively dependent on the degree of disability arising from the events. The worker who seeks compensation must provide factual evidence as to the events leading up to disability and medical evidence as to the existence and the cause of disability. Disability of even very short duration is covered by workers' compensation laws and precludes all other legal recourse for economic compensation.

In Québec, as in English Canada, sexual harassment has traditionally been considered to be a human rights issue, and complaints by victims of harassment have been dealt with by tribunals specialised in human rights, who are mandated to use their powers to both protect the worker from harassment, punish those responsible for the harassment, including the employer who has failed to protect the worker, and generally to provide remedy and support to the victim.

Recent court judgements have changed the way sexual harassment claims are dealt with when the worker has sought medical treatment as a result of the harassment. In 1996 the Supreme Court of Canada held that a worker who had received workers' compensation benefits for incidents of sexual harassment could not sue her harasser or her employer for damages under the Quebec Charter of Rights. In 2001, a subsequent judgement has extended this reasoning to all victims of sexual harassment at work who have suffered negative health effects, even in those cases where no claim for workers' compensation had been filed. Henceforth human rights tribunals may no longer grant damages to victims of sexual harassment and no law suits for damages may be filed against those responsible. Claims by sexual harassment victims are to be judged like those of any other injured worker, and the right to compensation will depend exclusively on the medico-legal evidence relating work incidents to disability.

In this presentation we will describe the effect of this new approach on the rights of women workers whose health is compromised by sexual harassment. We will review the policy issues that have led to this new approach and illustrate the consequences of this new way of dealing with sexual harassment with reference to cases brought before the Workers' compensation appeal Board (la Commission des lésions professionnelles). We will review the advantages and disadvantages of this new approach from the point of view of the victims of sexual harassment and conclude with recommendations to improve current policy so that it may better respond to the needs of sexual harassment victims.

While it is important to treat sexual harassment as a dangerous working condition that should be prevented under health and safety legislation, and compensable under workers' compensation legislation, it is equally important to insure that those responsible for sexual harassment may be brought to justice and ordered to assume the cost of compensation for the damage they've caused to the victim. The current situation leaves Quebec workers in limbo, where neither objective is obtained.

Although our presentation will focus on the situation in Quebec, the principles described may give rise to similar situations in all jurisdictions where physical or psychological disability relating to workplace sexual harassment are potentially compensable under workers' compensation law.

SUS05: 5 Sexual harassment among female personnel in an Italian hospital: frequency, correlates, and consequences on psychological distress

Patrizia Romito , Terri Ballard , Nicoletta Matton University of Trieste, Italy

This cross-sectional study involves the female personnel (doctors, nurses, technical and clerical staff, auxiliaries and orderlies) in one Italian hospital.

Questionnaires were anonymous and self-administered. For sexual harassment we used a modified version of the S.E.Q. (Fitzgerald et al. (1995). Data collection ran from September to October 1999; response rate was 62%. Prevalence of sexual harassment (SH) in the last 12 months was high: perpetrators were superiors, co-workers, and patients; harassment by subordinates was infrequent. 34% of women reported Gender Harassment by "colleagues" (superiors, co-workers) and 25% by patients. The proportions were lower for Unwanted sexual attention (respectively 22%) by "colleagues" and 9.5% by patients), and lowest for Sexual coercion (only from colleagues, reported by 3% of respondents). Analysis revealed two distinct patterns of SH by "colleagues" and by patients. SH by patients showed only few associations with job related factors, no association with women's personal factors, and no relationship with psychological health. SH by colleagues was strongly associated to job factors (women' position of authority, nights shifts, male/female ratio among personnel) and personal factors (marital status, financial worries, being the solo breadwinner, domestic violence). Results from multivariate analysis show associations between being in a position of authority and experiencing gender harassment and unwanted sexual attention by colleagues, while domestic violence and financial worries were strongly associated to both unwanted sexual attention and sexual coercion. Experiencing sexual coercion was associated to psychological distress, controlling for all relevant demographic, professional and personal factors.

Fitzgerald et al. (1995) *Measuring Sexual Harassment: Theoretical and psychometric advances*. Basic Applied Soc Psych, 17, 425-445.

SuP01:Labour Market, Welfare State and Women's Work

SUP01:1 The deteriorating mental & physical health

Mandira Dhar Calcutta, India

There is a fast increase in women work force in India with influx of rural women to urban areas in search of jobs. A reduction in family income due to retrenchments, educated unemployment, increase in women empowerment, living standards etc have led urban women to join workforce. Women doing multiple roles are failing to cope with stress and anxiety involved and it is taking serious tolls on their mental and physical health.

Aim: I tried to assess the reasons of stress and health hazards connected with it.

Method: I interacted with all classes of women of different ages, martial status, jobs and literacy. My interviewees included teachers, researchers, bank & office-goers, manual workers, domestic servants' etc. The objective was to find the environment of their work places, mode of commuting to work, hours of work and physical and mental strains involved.

Results: Middle-aged family women suffered from anxiety, depression, schizophrenia, hypertension, insomnia, cerebral attacks, cardio-vascular diseases, pre-mature deaths, diabetes, lower back pain, spondylities, ageing, cancer, pure immuneresponse, low radiation effects, hormonal disbalances etc. The manifestation of the depressions was loss of appetite, helplessness, inferiority complex, social isolation, emotional disturbances etc.

Conclusion: Women with mental disorders do not go to professional counselling due to poor economic conditions and social stigma. So they prefer to suffer quietly. Employers, society, family and Government should offer a better stress-free environment, the necessary support and health protection.

SUP01:2 Which working-structures and family life under information society? Gender parity policies in Europe

António B. Moniz (FCT-UNL, Portugal) Bettina-Johanna Krings (ITAS-FZK, Germany)

Does the 'new' working structure create women's liberation? Issues from the German and Portuguese cases

Historically the process of industrialization had another feature for women than for men: the explicit exclusion of the job market, the obligation on domestic activities as well as the restriction of vocational formation.

But nevertheless in the last two decades the integration of women into the job market and the development of equal chances within the work structure became one of the most important objective of gender oriented politics. Thus the slow but continious arise of women's employment is considered in all European countries. This process has changed dramatically the socio-cultural pattern within the different countries and is still going on.

The women's adaptation to the working conditions and to the performance requirements lead to new models of daily life styles. These include the whole range from the traditional conflicts between family obligations and occupation, to the new models of partnership agreements or individual living projects without children. In occupational structures, which are characterised by features of the "information society" women's behaviour toward their employment generally can be considered as 'modern' which means a professional oriented living style.

The studies, which are analyzing these processes, are focused strongly on the change of living and working conditions of women (and men). How do women create the combination of work and family? Regarding the socio-cultural changes what an be observed? Are there new forms of social exclusion or discrimination? How can family life be guaranteed by a change of the working structure? Are there models within the European countries? How can be understood the German and the Portuguese cases (that usually are taken as opposite or clearly different)?

Regarding these processes we suppose that the term 'individualization' does explain quite well these changes, because of several reasons:

- 1) It shows the continuation of the modernization process.
- 2) It shows that these processes are characterised by ade-politicalization of the working structure.
- 3) There is a need on political strategies.

In order to discuss the process of a female individualization as an European process we will focus mainly (but not exclusively) the German and the Portuguese cases. In terms of working structures, gender life styles and social policies of course there are cultural differences, but these two cases will be analysed in order to understand the process of development of "new" working structures. But the experiences already show that they can be seen as paradigmatic of the sociocultural trends in Europe, for its social cohesion and also for the need of a political framework.

SUP01:3 Why Become a Single Mother? An International Perspective

Maria Libertad Gonzalez Luna Northwestern University, USA

In 1994, 22% of all families with children in the US were headed by a single mother, and this proportion has been increasing steadily over the last few decades. The decision to become a single mother is undoubtedly affected by all sorts of social, religious and psychological factors. However, it is also undeniable that there are economic variables with a potential to influence fertility and partnership decisions, as economic theory has long acknowledged.

There is a relatively large literature with around 25 years of history that attempts to estimate the effect of economic variables (especially welfare benefits) on marital status and fertility decisions with US data, although no generally accepted conclusions have been attained.

This study stems from the observation that the prevalence of single mother families varies a lot across countries. In the mid-1990's, while they amounted to more than 20% of all families with children in the US or Britain, they were less than 5% in Italy, Japan or Spain. My goal is to apply the kind of model that previous research has used to estimate the determinants of female headship in the US to data on several countries, in order to find out the possible causes of the disparities in the prevalence of single mothers across industrialized nations.

Most of the literature on the determinants of female headship in the US focuses on estimating the incentive effects of welfare benefits on the woman's fertility and partnership decisions. Some studies also include other variables related to the labor market and the marriage market. Most

studies estimate cross-sectional regressions, which rely on interstate variation in benefits to identify the welfare effect (Schultz, 1994). Some use more than one period and introduce state fixed-effects (Hoynes, 1997; Moffit, 1994) in order to control for omitted state variables. The results from these studies can be summarized as follows:

- Significance of labor market prospects (wage opportunities) and marital prospects.
- Importance of unmeasured cultural and social norms that vary across states.
- The results are crucially dependent on including state and year fixed effects.
- Mixed evidence on the effect of welfare benefits: Some find small but significant effects (Schultz (1994), Rosenzweig (1999)). Others find no effect (Moffit (1994), Hoynes (1997)).

My model is based on the approach taken by Hoynes (1997) and Moffit (1994). The utility of a woman is assumed to be a function of her own consumption level, the number and quality of children that she bears, her marital status, and her leisure time. Her income is composed of wages (if working), public assistance (if single mother), and a fraction of the husband's income (if married). Children require time and goods. Childcare time can be purchased, but there are a minimum number of hours that must be provided by the mother. Empirical implications can be derived from this simple framework. I use data from the Luxembourg Income Study.

I estimate Probit models where the dependent variable takes the value one if a woman is a single mother. I use data on 18 countries in two different periods (early 1980s and mid 1990s), with a total of almost 313,000 individual-level observations for women aged 16 to 64. A two-stage estimation method is needed in order to get the right standard errors for the country-level variables.

The estimates suggest that age and education are always significant, in particular more education is always associated with a lower probability of becoming a single mother. I considered five different explanatory variables at the country level: total fertility rates, public assistance level, and three labor market variables (wages, unemployment and activity rates) that I later collapsed into one. All of those variables show the expected signs. Both labor market variables and public assistance seem to be relevant in explaining the prevalence of single mothers across countries. Single mothers seem to be more prevalent in countries with higher public support for this type of family, higher female wages, lower unemployment rates, and higher female activity rates.

These results are consistent with the intuitive explanations provided by some sociologists for the increase in single mother families in industrialized countries since the 1960s. For example, McLanahan (1994) refuses the argument that welfare caused the growth in single-parent families, offering as alternative explanations changes in technology, the labor market, and social norms and values. According to her, a main cause for the increase in single mother families is "the growing economic independence of women", thanks to higher wages and reduced housework time. "Women who can support themselves outside marriage can be picky about when and whom they marry. They can leave bad marriages and they can afford to bear and raise children on their own." In the same line, another contributing factor would be the decline in men's earning power relative to women's, which decreases "the economic payoff from marriage". If this is the case, then we will probably witness even further increases in the prevalence of this type of family in the future.

SUP01:4 The Job of being at Work: Women and Childcare in Argentina during the 90s.

Silvina Ramos Margarido (FLACSO), Argentina

During the nineties women incorporated into the labor market in Argentina more than ever before, as can be seen in the sharp increase of the female activity rate. There were -and still aresociocultural as well as economic factors that explain this phenomenon. Among them are cultural factors, the increasing unemployment of householders and the raising number of monoparental families sustained by women. These are not necessarily concomitant causes.

Facing this accentuated tendency we wonder about the facilities that women with small children have when they go to work or when they look for one. We focus our investigation on women with less than six years-old children, when school is not mandatory. This topic has not been extensively explored.

Women's role in urban areas of this country is changing from a previous dominance of domestic and reproductive tasks. Their entrance into the labor market has been segmented in professions linked to health care or education and those sectors with enough schedule flexibility that allows them to cover the double task of taking care of their children and their work outside of their own house

Public sector institutions have nurseries or kindergartens for the children of women working at such places. This allows these women to have their children at a nearby place during their working hours at a null or very low cost.

There exists a law that regulates the provision of this type of institutions for the people that work in the private sector. But the government has not enforced its application and very few companies have the appropriate facilities.

The analysis should take into account the following two points. First, a woman who could share or alternate the care of her children with the father is not equivalent to a woman who must rely heavily on the help from other people, such as parents, neighbours, and others. While it is desirable that men as women share their efforts in the care of the children it seems to be a result very difficult to obtain, given the predominance of a cultural patterns of masculine dominance in our society. Second, that multiple situations exist. Different women could have different contractual relationships with their employers, especially if they work in the informal sector or as house personnel. Or, as mentioned before, because she could be working in a private institution without childcare services, due to size or other reasons.

Research on strategies of women entering into the labor market considering the different family background, poverty conditions, and education could give us the information about the public policy on childcare and thus if such policy is contemplating the new situation in the labor market allowing the equality of employment opportunities for women and to earn her own income.

The consequences that have the scarce public offer of the childcare would determine the work type and the net remuneration of the women. If it is a nuclear family, their incomes are clipped in function of sustaining in a private way the childcare and although that can be a shared cost but that in general it associates at an equation cost—benefit about the woman leaves her home to work. This impacts at the same time in the economic independence that could be able to get.

However, in those cases that women don't access to the public service for not belonging to the population's strata under poverty but at the same time it is too high the cost private child care

considering their salaries, implies a double determination: to the women, to condemn them to works that should combine wisely the hours of employment with the care of the children and to the children too. It has to be noticed that the middle class in Argentina was falling into poverty since the 80's but deeper in the 90's.

To all things above mentioned, should be added the argument that UNICEF promotes in the World Status of the Childhood 2001 about the importance of the early education for the children, in a call to the provision of services in this sense as universal politics.

An approach to the data shows how the children that attend do it at private gardens and they belong to the homes of the quintiles of high incomes while the other ones -the majority - they don't attend or they make it so much later. This could be showing that the women of the sectors of smaller incomes, when not being able to buy in the market the private provision of infantile care, operate as consequence the non attendance and the search, -in the best in the cases - of family strategies or arrangements of another type -neighbours, mothers caretakers, to converge to the work with their children - to look for a work, to attend the same one in the case of getting it and finally, to sustain it.

The provision of child care is not the only form in which could guarantee an equitable access to the labor market: there are cultural rules to change with regard to be aware of the responsibility in the care of children and older persons as a question shared by both men and women. However, this road is slow and tortuous, and it would demand too much time, in which the 'feminisation' of the poverty would continue increasing. Meanwhile, subsidies or other mechanisms could also serve as guarantee for the mentioned problem.

We choose the public provision because we believe that their lack shows several negligences: toward the condition of the women's activity and to the formation and care of the future generations. This could be showing a double discrimination then: to be woman and to be poor.

Lastly, we don't forget in this context that this discrimination for gender and also for incomes, it finishes not affecting alone to that woman that is not able at least to search of an employment under the conditions that this labor market imposes at the moment, but also to the children.

Objectives

- 1. To show the differential impact for the women with respect to the labor market, considering the presence of children under six years old in the families.
- 2. To explore and to describe the strategies of women to get childcare for attend to their jobs.
- 3. To explore and to describe the public provision of infantile care. (Metropolitan area of Buenos Aires)

Methodology and surveys

All the surveys of households available will be used (EPH, 1990-2000) included the Surveys of social Development and Conditions of life (EDS, 1997-2001), the special modules of EPH like that of Goals for the Childhood, etc. Also I will work with the data of gardens and public nurseries for the Metropolitan Area, not discarding the possibility to carry out a small report in some of them to visualise the heterogeneity of the demand. I will make some interviews in depth to guide our empirical work to verify the diverse strategies adopted by the women that are unemployed, underemployed and employed.

SUP01:5 Role of Women in the Economy & Civil Society

Ali Abdi Mohamed Female Headed Households Development Association, Somalia

Introduction:

Women oppression spans all stages of their lives and sometimes even before. In some countries, as you know female fetuses are aborted and female infants killed because of gender. In the Somali perspective, the origin of discrimination is in the home and begins early in life. Always the birth of a boy is celebrated and a goat or a sheep is slaughtered while that of a girl is not.

Economic:

In the Somali context, women's responsibilities are remarked to be unusually demanding given the current war situation, in addition to the extreme harshness of the environment and some peculiar cultural practices. As effect from the war, women in Somalia have been forced to the sole breadwinners' o families.

As the mainstay of Somalia society in these troubled times and are increasingly emerging as the major bread winners and head of households because of the conflict-fuelled socio-economic upheavals they lack the exposure to execute decision making, combined with cultural bias against women in leadership.

About 60% of the households are female headed households and roughly about 80% of the Somalia women are involved in various sorts of business e.g. selling tea/food in makeshift cafes, selling chat, charcoal, clothes, vegetable/meat etc. as an income to support their families, the adolescent girls works as a maid for certain families (as an additional income for the family) and the mothers are then, unavoidably pushed into recruiting the assistance of their younger daughters.

The involvement of women in the economic, social and cultural life is usually underestimated. This most severe in economic life. With the economic continuously to deteriorate in most parts of Africa, Somalia being an example, women will assume a disproportionate share of the burden of adjustment. As the primary providers in Somalia households, they will struggle to find the means for family survival as the gap between spend on health nutrition-related activities precisely as households rely more and more on their own care giving capacities.

Employment Opportunities for Women

Due to the very low education of girls, it is very difficult for them to hold good earning jobs, most of those with basic education are employed as secretaries, the unskilled part of women are holding subordinate positions such as cleaners, cooks, messengers etc. Although they earn meager salaries but they are main support for their families. Women have no access to promote for the higher posts even if they are qualified for.

On the political positions of the Somali government, the Somalia women have limited rights and choices to participate for the government political positions and civil servants posts because such higher posts are elected according to clan basis, and in this respect men have easy access to clan support rather than women. In addition, they have their contribution of ideas through the newspapers as well as physical and financial resources in order to develop their country.

SUP01:6 The Challenge of Mainstreaming Gender at the Liverpool School of Tropical Medicine

Sally Theobald Liverpool School of Tropical Medicine

The poster explores the ways in which gender roles and relations shape the organisational culture of health related institutions in both the north and the south and the questions and dilemmas raised by initiatives to address these. We present a case study of the Liverpool School of Tropical Medicine (LSTM) and raise questions about/ discuss the implications of the unresolved problems in our own institution for our involvement in consultancy on gender mainstreaming in the health sector in southern countries.

We document the management structure and decision-making processes within LSTM from a gender perspective. There are two complementary groups working to promote equity in opportunity within the day-to-day running of the School. The Equal Opportunities Committee was set up in 1990 with the remit of advising the Director on equal opportunity issues. The Gender and Health Group, initiated in 1995, has the goal of encouraging the integration and application of gender analysis into all areas of the School's work, including teaching, research, consultancy and human resources management. Drawing on personal experience and interviews with members of both groups (past and present), the achievements to date are explored and future challenges highlighted.

Members of the Gender and Health Group are active in consultancy work advising on gender mainstreaming strategies and processes in the health sector in countries of the South (Malawi, Mozambique, Ghana and Bangladesh). The poster explores the question 'What does it mean to work in such an advisory capacity in the South, when many institutes and organisations in the north have significant room for improvement?' The poster concludes with a call for international dialogue and support in sharing and contextualising examples of 'best' practice. There is a need to create partnerships, both within and beyond our institutions, to work towards more gender-sensitive organisations.

SUP01:7 Women's Position in the Public Service

Mirriam Clever Matinika
Public Service Association(PSA)

The poster will try and bring the following issues: the new labour market trends in Zimbabwe and display an aspect of how the global trends have influenced ours; how they can be applicable in our context. We will put our achievements as a nation and relate them to the ILO provisions and other international ratification. In bringing out the achievements, the historical, cultural aspects and the gender aspects of Labour market demands will be demonstrated e. g the gender aspect of salaries, sexual harassment etc.

Our poster will have 4 parts. Part 1, which if folded will show like the front cover will have a photo for the women's management committee. These are the women championing the cause of gender equality in PSA. It will then have the thematic title which is also standing in as the Title of the presentation "*Women's Position in The Public Service*" There will be some slogans 'Women Push Her Up -: PHU' not Pull Her Down -: PHD and Rise! Speak out! Part 2 which is adjacent to part 1 and if folded will form the back part of the poster will have a picture of members of for National Council (NATCO) for PSA at one of the meetings.

Note: This is a policy-making board/council that meets once a year and constitutes half the delegates to the Congress. Important to note will be its gender composition. Hovering on top will be a big woman in her African duke shouting 'Women don't gumble with your rights! Above the photo we put a title "*United we stand devide we fall*" Below the photo there will be the slogan `Together we can make it.

PSA is an activist agent for change in the labour movement and as such it has practical strategies which it has used to make the demands known to other social partners, parliamentarians and Government as the civil service employer. These we will put on the 3rd part together with the achievements so far. Though illustrated here, part of the interactive poster session that show our strategy both past, present and future will include topical issues like

- Marginalisation of women Sexual Harassment
- Promotions and women emancipation
- Rape and Sex for job
- Maternity Leave
- Breast feeding time
- HIV/AIDS

Part 4 will dwell on the Harmonised labour bill and the engendered salient issues. Firstly we will describe what it is to harmonise labour laws in Zimbabwe, the consequences of women in the process and then the Public Service Women's call in the harmonised labour bill. We will also put a box of statistics for women in the trade unions in Zimbabwe in Decision making positions and women civil servants in decision making positions from school heads, directors ,under-secretaries and upwards vis- a- vis the proportion for men for same positions.

SuW06: Globalisation, the Gender Divisions and Labour Market Transformation, 2

SuW06:1 The Impact of Globalisation on Women's Livelihoods – A Case Study from Indian Scenario

Zubeeda Banu Quraishy Indian Instituteof Management, Bangalore

Aim: To study the impact of New Economic Policies as part of globalisation on women in developing countries.

Methods: Case study approach and in-depth interviews along with observation a traditional anthropological technique.

Results: In developed countries while policies have been formulated to integrate women into the mainstream of development on equal terms with men both as agents and beneficiaries, in developing countries, the policies on women are yet to be formulated. So, as a result economic adjustment programmes have failed to solve the problem of poverty in third world countries making women suffer the most particularly in tribal and in rural areas where the response of macro policies to environmental degradation is very diverse in turn creating a negative impact on women. More over in India economic adjustment programmes adversely affect women as the Indian society being largely patriarchal, the property rights are vested in men and do not accommodate women as owners of land. And moreover in third world societies woman's rights in lands are use rights rather than outright ownership rights, her access to credit and other extension facilities are restricted. T! his has resulted in invisibility of the labour made by women which in turn creates a negative impact on other aspects of their lives for example, their access to education, new skill and technology, health and health related services. Policy makers and particularly the economists have ignored the social and family structures that is, the social context in which the development is to take place. This has a greater impact on those households particularly headed by females both in rural, tribal and in urban areas. More over development planning whether national or international has traditionally been gender blind. Keeping this as a backdrop a study has been undertaken to analyse how the macro policies formulated on the basis of changing global economic environment are having an impact on the women and on their livelihoods among the Malayali, a tribe till recently been practicing subsistence agriculture in Kolli hills in Tamilnadu had changed the cropping pattern after the introduction of new economic policies.

Conclusion: Thus, with the introduction of new economic policy the status of woman was reduced to a subordinate position as they were relegated to managing the "traditional" sector(growing of subsistence crops), while men moved to "modern" sector(growing of cash crops, in this case cultivating of tapioca) and consequently dealing wit the market. Thus in majority of the cases women ended up doing redundant task like working as wage labourer or family labourer in the fields of tapioca by doing transplanting and weeding and digging the tapioca during harvesting. Unlike in subsistence agriculture where both men and women had equal access rights to the land and also took part in decision-making but with the transformation of the food production system the rights of women (access to land i.e, use rights) were not only slowly eroded but significant inequalities in access to private property resources came to stay. With the introduction

on women workers is compounded by the fact that the women workers are likewise the care-givers, responsible for children and the home.

The project seeked to examine the impact of the pyramidal work organisation in the shoe industry on working conditions, exposure, health and family life, using a gender-sensitive, participatory research approach with a view to concrete preventive intervention strategies. Men and women workers type of job, as well as exposure profile, were characterise in 10 little shops (ranging from 5 to 37 employees) and in 10 houses (1 to 4 workers) Results show that men and women are not performing the same type of work and are not working with the same chemicals. Work and family life balance were investigated through focus-group.

Physical and mental health problems, not only illness but early changes and self-reported symptoms will be documented as well as the relation between exposure profiles and family and social relations (e.g. strategies to conciliate working life and family, relations within the family and with children.) We wish to reinforce the work of unions and community associations through the discussion about proposals to improve the quality of life and working conditions and to increase the awareness of: a) health workers in clinics to the health and safety issues with special emphasis on women workers:b) workers about the impact of their working conditions, their labour rights and the community rights.

SUW06:3 Small, healthy and safe? - Controlling women's risk from workplace change

Andrea Shaw and Verna Blewett Shaw Idea Pty Ltd and New Horizon Consulting Pty Ltd

Small and medium enterprises (SMEs) can choose to provide healthy and safe working environments for women workers, even in an environment marked by change. This paper reports on a three-year research project which identified and examined the strategies for successfully managing the occupational health and safety (OHS) consequences of organisational change in industries where women's employment predominates. The study found that the key concept is choice: the strategic choices that small and medium enterprises make in the management of OHS during times of change.

SMEs experience a disproportionate number of work-related health problems. The significant changes in women's work in recent years, combined with women's differential occupational injury and disease experience, suggest that women may be most at risk of adverse OHS consequences of organisational change. The research used 13 comparative qualitative case studies in three industries: hospitality, textiles clothing and footwear and child care. An analysis was made to identify the different responses of the enterprises to both externally and internally driven changes over time. Features of their responses, called differentiators, were identified to allow the enterprises to be categorised. Enterprises, which demonstrated effective management of OHS, were characterised as proactive, some were transitional and others were identified to be reactive in their response to change.

Primary differentiators describe fundamental features of how the enterprises arranged their affairs. They were identified to be a culture of respect; the level of autonomy and job control; and the integration of OHS into other aspects of management. Secondary differentiators describe features of the enterprises' management that were the concrete expressions of, or results of, the primary differentiators. These included the nature of wage bargaining, response to OHS regulation and the role of government and response to cost pressures. Non-differentiators are features of the enterprises that, while they may have been significant for OHS management in individual cases, did

not differentiate between the categories. These included the use of subcontractors and outwork, technology and ownership structures. The taxonomy proposed for the enterprise categories reflects these factors and emphasises the fluidity of organisational change.

The research identifies strategies for enterprises, regulators and governments that will support the capacity of SMEs to provide safe and healthy workplaces for women.

SUW06:4 Structural Adjustment, Women's Work and Health in India

Lakshmi Lingam Tata Institute of Social Sciences, Deonar, India

Women play multiple roles of which work for wages is one among the most significant ones. It not only contributes to the augmentation of the household income but also determines in a significant way, the status of women and their well being. Majority of Indian women is found in the informal sector. They are engaged in monotonous, repetitive, backbreaking tasks either as casual workers in the public sphere or as home based producers in the private sphere. They face several health problems emanating from the workplace, household economic situation and the living environment. The adoption of liberalization, privatization and globalization policies by the Indian Government since the past decade, has accentuated the informalization of industrial work, lead to declines in male employment and increase in women's work participation predominantly at the bottom of the rung.

The present paper attempts to:

- Summarize the perspectives that emerge from Indian studies on women, work and health;
- Highlight the inadequacies of legislation and the poor social and policy support to women; and
- Elaborate the findings from an empirical study conducted in the city of Mumbai among 995 low-income households. The study traces gender differentials in occupations, incomes and health outcomes.

SUW06:5 Globalization a gender inequality in women health community participation programmes. Social images through life stories

Maria Cristina Gonzalez Universidad de Carabobo- Venezuela

This Research in an attempt to search how globalization as a new socio-political paradigm has been profounding gender inequality in working women in community health participation programmes.

Purpose.

To search the social images, which has been contributing to profound gender inequalities in community health programmes, using life stories.

Methodology.

This qualitative study was developed using life stories of 10 women incorporated in community programes. The life stories were analysed taken into account the discourse analysis technics in order to found all the social images.

Results.

In this study gender inequality was the most evident result. Women's role is considered only as a helpers. They don't participate in relevant matters.

The leadership is in men's hands specially in health team, because they are represented as the only people who can manage that situation. They have the power and the Knowledge

Women's activities are reduced to:

Cleaning,

Organising social and cooking activities,

Distributing information around community,

Women's role is represented as servants; they are the best to do that for being mothers.

SuW07: Welfare Systems and Labour Markets

SuW07: 1 Fertility and Welfare in European Households

Mette Lausten
The Danish National Institute Of Social Research

Fertility and Welfare in European HouseholdsIn recent years, fertility has declined all over Europe. This developme nt is often linked to the increasing female labour supply. The young generations of women in the European countries are (at least) as educated as the men, and they want to use their education in the labour market. In many countries, however, it is difficult to combine work and family. Childcare possibilities are often rare and/or very expensive. Simple analyses of the fertility rate show larger declines in fertility in the Southern European countries than in the Northern European countries during the past decades. The Nordic countries have changed from having the lowest fertility rate in 1960 to having the highest fertility rate in 1999 (Eurostat, 1999). On this background, one aspect of understanding why more and more women in Europe seem to choose work instead of children, is to get better insight into the welfare consequences of having children in different European countries, and thereby to investigate whether fertility has decreased the most in countries where the welfare costs are high.

The overall purpose of this analysis is thus to investigate the impact of fertility on the distribution of family income, i.e. the welfare consequences of having children. How much will an additional person in the family affect the family income and thereby the position in the income distribution? In doing this structural differences between the countries, such as maternity leave schemes and childcare possibilities, are taken into account. An additional research question is why different groups of the population have different numbers of children. Data for the analysis will be the first four waves of the European Community Household Panel, covering the years 1994-1997. The analysis will be based on an econometric framework and estimate the direct impact of fertility on household income. According to economic theory decisions on family size (the timing, spacing and number of children) and labour supply are taken simultaneously. Furthermore, labour supply is clearly important for the income. The consequence is that fertilit y is not an exogenous variable for the income determination. The estimation procedure will take account of this by applying an instrumental variables approach.

SuW07: 2 Welfare in Transition. - A Local Example in changing World

Berit Sundgren Grinups University of Karlstad/Norrköpings kommun

The municipality of Norrköping initiated in the autumn 1999 a two-year project, a study on welfare issues. The aim of the project is to investigate how municipal resources can be mobilised in order to achieve the vision for the year 2010 of "a good life" for everyone in Norrköping. Referring to the change in society from an industrial society to a knowledge-society is also an evolution from a society of producers to a society of consumers. These changes have impacts on the organisation and the attitude of the labour market/working life and the welfare state. The study in Norrköping is an investigation to the related changing process for individuals and groups in a local community.

The Swedish local authorities are faced with a number of challenges like, for example continued adjustment to the welfare policies of the other EU countries, the dramatic increase in the need for the care of the elderly, and the growing difficulty of finding staff for the care-and health-sector. Besides this, Norrköping are faced with challenges of a more local character e.g. facilitate the meeting between working-class culture and educational culture and the meeting between different ethnic cultures.

In the project the report "Hard Facts - Welfare development during the 1990's in Norrköping" (2000) provides a picture of a decade of great economic restraint within the municipal activities in Norrköping, which among other things has had an effect on the number of employees. At the same time the need for municipal welfare service has grown. Some of the changes carried out during the 1990's are more restrictive assessments and increases in tariffs. Another result of this is that cost-increases have been kept within certain limits despite increased needs. In 1998 the trend was broken in that several curves began to point upwards again e.g. the number of available jobs, the level of education and the investment in crowns per pupil in the compulsory school. On the other hand the need for social support of and treatment for children and teenagers and marginalisation from the work-force are still at a high level.

The project also includes a qualitative investigation. in eighteen strategically chosen groups issues have been I discussed on how changes in welfare during the 1990's have been experienced and how people view welfare in the future. It is also of interest to study the significance of gender, age, education and ethnic background with regard to these tasks. This study will be presented in a report in this autumn. The final commission in the project is to make proposals for the future welfare politics in the municipal of Norrköping from the results, analysis and conclusions from the two studies.

SuW07: 3 The Impact of Restructuring and Casualization of Jobs On Home Health Care Workers Stress Levels

Isik Urla Zeytinoglu, Margaret Denton, Sharon Webb McMaster University, Canada

Home health care is a female dominated and a fast growing industry. In the last decade, the home health care system in Ontario, Canada has been restructured. Under the restructuring process there have been changes at the health care system, organizational and individual work-design levels. The system has changed to a 'managed competition' model where organizations bid for three-year contracts through a Request for Proposals process. Organizations have restructured to fit into the new system and there has been a shift to casualization of jobs in the form of part-time, casual (no hours guaranteed) and (self-employed) contract jobs. The purpose of this paper is to examine the impact of the home health care system restructuring, organizational changes and the casualization of jobs on home health care workers stress levels. Data come from interviews with key decision makers and focus groups with workers. We conducted 59 interviews with directors, senior managers, local level union representatives and board members of 11 home care organizations in a medium-sized city in Ontario. In addition, we conducted 28 focus groups with a total of 171 workers employed in these organizations. They employ a total of 2355 workers. Data were analyzed using QSR N5 qualitative data analysis software. Results will be presented and implications of findings will be discussed.

The Study is funded by the Ontario Workplace Safety and Insurance Board. (Margaret Denton, Principal Investigator of the Project.)

SuW07: 4 The gendered impact of the socio-economic transition on health care entitlements in urban China

Rachel Tolhurst and Tang Shenglan; International Health Division, Liverpool School of Tropical Medicine, UK

Qian Xu and Yan Fei; School of Public Health, Fudan University, China Hilary Standing; Health and Social Change Programme, Institute of Development Studies, UK

What are the implications of the changing labour market and health sector reforms for the health seeking behaviour of different groups of women in urban China? The Chinese economic transition is bringing about profound changes in women's position in the workforce, the family and society, such as increasing gender segmentation in the labour market and the intensification of multiple roles in the household and workplace. The erosion of the social benefits system based on the individual work unit has led to concern about declining access to health care by 'vulnerable groups', such as the unemployed, dependents, the elderly and migrant workers. Historically there has been relatively good provision of preventive and curative care for women's health in urban China. However inequalities in entitlements to health care for women's health problems may also be widening. This paper outlines the context of the multiple socio-economic changes in urban Chinese society and raises questions about their implications for health seeking behaviour and equitable access to health care by different groups of women.

The paper presents case studies drawn from qualitative research carried out in two Chinese cities to illustrate some of the emerging issues facing women in different situations with regard to getting health care. The qualitative research included interviews with women and men from different groups such permanent city residents who were working, the unemployed, migrant workers, the elderly/retired; the disabled and those officially designated as 'poor'. These interviews focused on the individual's health, working situation, insurance, and responses to specific episodes of ill health, including women's reproductive health problems. Interviews were also held with enterprise managers, and other stakeholders in the provision of health insurance and health care. The paper also draws on relevant findings from a household survey of workers and other groups conducted during a related research project. Policy implications are drawn for ensuring access to health care for different groups of women in the transition to a municipal benefit system.

SuW07: 5 Alive and fairly well: Welfare State restructuring and Childcare in Sweden

Christina Bergqvist National Institute of Working Life, Sweden

Since the 1970s the Swedish welfare state has increased the provision of publicly financed childcare and generous parental level. Beside the goals of giving good care and education for pre-school children these policies have also been intended as a vehicle to promote gender equality and full employment among women as well as men. The move from a male-breadwinner to a dual breadwinner norm has been one of the biggest social changes of the last 30 years. This has been visible in Sweden's childcare policies.

However, during the 1990s the Swedish welfare model was threatened and put under strain. The employment rate had fallen dramatically and unemployment soared to levels unthinkable since the 1930s. In addition there were also an accelerating public sector deficit and increasing public expenditures. Given this new situation its is reasonable to assume that serious attempts to transform the Swedish welfare state might have been undertaken. In the project presented here Anita Nyberg

and Christina Bergqvist have investigated how the public childcare systems was affected by the crisis during the 1990s. Our investigation relies on a combination of data on expenditures and qualitative analysis of the childcare sector. We have examined five important characteristics associated with the Swedish welfare state. These are generous public spending, high quality in social services, limited scope for the private sector, universalism and egalitarianism. By analysing whether and how these characteristics have changed in the 1990s, we assess what has happened with the childcare sector.

Our result shows that a restructuring of the childcare sector has taken place, but without the severe retrenchment that many had feared. Certainly, there was a reduction in the resources devoted to childcare on a per child basis during the 1990s, but at the same time a larger share of pre school children than ever is offered a place. In sum, we find that generous public spending, high quality, universalism and egalitarianism are retained, while change is seen in increased marketisation and privatisation.

SuW06:6 Closing of gender gap in ill-health among unemployed - a gender theoretical analysis

Anne Hammarström Umeå University, Sweden

Since 1970s, there has been considerable number of research and documentation of unequal distribution of ill health between men and women, especially in industrialised countries. The most common description of gender differences in ill health is that although men die earlier than women, women have poorer health than men do.

In recent years, this phenomenon has been criticised by the gender researchers suggesting that gender differences in health is more complex and inconsistent then previously observed and emphasising over-generalisation of the view and how it became the norm that the fact of inconsistencies and complexities in the pattern of gender differences have been overlooked. Gender researchers have warned against an uncritical acceptance of empirical evidence on women's greater ill health compared to men. A British study for example demonstrated that the gender differences were less apparent or reversed for a number of physical symptoms or conditions except for psychological distress, which showed consistently female excess across the life span. The authors concluded that the direction and magnitude of gender differences in health vary according to age, symptoms or conditions that are measured. In order to understand the processes, which creates or diminish gender differences in health, there is a need for more systematic evaluation of existing evidences with more reference to different gendered social and cultural contexts.

The aim of my paper will be to analyse the closure of the gender gap in ill health among unemployed men and women. In earlier research I have demonstrated that in a population of young people unemployment seems to decrease the gender gap in relation to psychological symptoms. In the paper I will also analyse the gender gap among adult unemployed in relation to different health outcomes.

Method: A cohort consisting of all school leavers in 1981 (1083 pupils) from the municipality of Luleå, an industrial town in northern Sweden, was prospectively followed during 14 years with surveys at four different times (age 16, age 18, age 21 and age 30). The total non-response rate after 14 years was 3.5%. The data was collected with a comprehensive questionnaire, as well as with

interviews of a group of unemployed. Besides, interviews have been performed at the base line study with all form teachers and school nurses.

The paper will also analyse possible reasons for the closure of the gender gap among

SuW06:7 The problems of working elderly women in Russia

Larissa Mountianou Central Research Public Health Institute (Moscow, Russia)

Present-day demographic situation in many developed countries demands to research and solve the problems of old people work. Difficulties in labour of working elderly people can be considered as the problems of working elderly women because now in Russia like in other countries share of elderly women among old people amounts about 70 percents. Near by 25 percents of Russian old people are working. Also about 25 percents of Russian old women are working. The age of overwhelming majority (87 percents) of them is from 60 to 69 years old. Naturally one of the most important factors of old women's possibility to work is remaining of good health. Our research results illustrate that 77 percents of working old women have good health by their opinion.

All of the working old women work in the state economic sector. It is clear that payment for unqualified job is not enough for life. Unfortunately now we see one of the Russian socio-economic crisis results, which consists in too little payment for qualified job in scientific and education state systems (that is teachers, lecturers, researchers, etc.). Thereupon young people practically don't work in these state systems. Therefore there are no obstacles for old people in proceeding to work in scientific and education state systems.

So working old people have frequently small salary for their job. Size of their pension, which they obtained simultaneously with salary, does not go up unlike the pension of nonworking old people. So proceeding to work became unprofitable for old people because of the sum of working old people pension and their salary is frequently less than size of nonworking old people pension. Naturally old people proceed to work not only for obtain a profit. They proceed to work frequently to avoid their loneliness and receive moral satisfaction.

So in Russia we see unequity to working old people which we need to remove.

SuW08: Chemical Exposures, 1

SuW08:1 Chemical Risk Assessment of Female Workers in Estonia

Piia Tint Tallinn Technical University, Tallinn, Estonia

Introduction: The creation of an information system including chemical hazards identification and charting of workers exposed to these hazards was started by the National Health Protection Board of Estonia in 1996. More than 25 000 workers at Estonian enterprises are exposed to different types of chemicals (mainly solvents and dusts). As the big chemical factories have disintegrated, the present high exposure to different chemicals in Estonia is mainly connected with the increasing number of petrol stations and loading work at ports, because large amounts of dangerous chemicals are transported through Estonia. Organic solvents that penetrate into the body are strongly toxic (benzene in particular).

Aim: The aim of the present study was to assess the real state of occupational hygiene at workplaces and the level of workers' knowledge on safety risks and measures.

Method: A questionnaire for examining the level of female workers' knowledge on health and safety risks connected with chemicals (particularly chemical solvents) and the suitability of existing safety instructions etc., was compiled. Russian- and Estonian-speaking female workers (dyers, house-painters, decorators, workers cleaning metal products and clothes, laundry workers, workers in oil-shale chemical processing, scientific workers in laboratories) were examined.

Results: The main problems arised from the side of workers using chemicals: old equipment, shortage or unsuitability of protective clothing, devices, no or out-of-date safety instructions. The majority of workers know, how the chemicals influence on the health. The knowledge in health risks is more obvious if the chemicals have an acute effect (skin or mucosa irritation). Some workers point on the need to replace the toxic solvents by less toxic ones. The proposals for the improvement of work environment: more efficient ventilation, consideration of the workers' opinion, up-to-date equipment. The most common diseases due to using chemicals: allergic reaction on skin, eyes or mucosa. The workers were reluctant to show their health damages because of fear of loosing job.

SuW08:2 Decreased Fertility in Swedish Hairdressers

Anna Axmon L. Rylander, M. Albin och L Hemar Dept of Occupational and Environmental MedicineUniversity Hospital Lund

Hairdresser are on a day-to-day basis exposed to chemicals which might be harmful to the reproductive system. They also have a rather unique working situation, with long working days and a job that to a large extent requires working in a standing position. Moreover, in Sweden many of the hairdressers are self-employed, which may add a stressful element So far only a few epidemiologic studies have been made on female hairdressers and the results of these are inconclusive. The aim of the current study was to investigate whether female Swedish hairdressers had decreased fertility, measured as the time to pregnancy (TTP), and increased risk of miscarriages.

Questionnaires were sent to 5219 female hairdressers, born in 1960 and later, and to 5225 controls, matched by age, from the general population by age, from the general population. We

collected information on each woman's first planned pregnancy, as well as on whether or not shed had ever experienced a miscarriage. Women who had never been pregnant were asked if they were, or at some point had been, trying to conceive, and if so, for how long. The hairdressers were asked to supply information on working conditions, as well as on different chemical treatments performed , during both the period before conception and the first trimester of the pregnancy. Information was available for 1784 pregnancies and trying-times i the hairdresser cohort, and for 1760 pregnancies and trying-time in the control cohort .

TTP was compared by calculating a Success Odds Ratio (SOR). Since pregnancy is a wanted outcome, SOR <1 indicates a prolonged TTP for the exposed cohort. Trying-time were included as censored TTPs. The miscarriage frequencies were compared using the standard Odds Ratio (OR) Pregnancies ending in induced abortions, extrauterine pregnancies, and still ongoing pregnancies were excluded from analyses of rate of miscarriages in the first planned pregnancy.

The hairdressers had a somewhat prolonged TTP as compared to the control cohort (SOR 0.90; 95% confidence interval (C) 0.83-0.98). Within the hairdresser cohort, no hazardous effect was found from any of the chemical treatments investigated. However, an Increase in TTP was found for self-employed hairdressers as compared to employees (SOR 0.83; Cl 0.73-0-95). An increased TTP was also found for women who reported a self-perceived stressful working situation (SOR 0.80; Cl 0.69-0.92). Including both employment status and self-perceived stress in the model did not change the estimates more than marginally (<2.5%). In the hairdresser cohort 348 (14%) of the women had at some point in their life unsuccessfully tried to conceive for a consecutive 12 month. The corresponding number among the controls was 307 (12%; OR 1.26: Cl 1.07-1,48).

There was no difference between the cohorts with respect to first planned pregnancy miscarriage risk (OR 1,11; Cl 0.87-1.41), or ever having experienced a miscarriage (OR 0.92; Cl 0.79-1.07). Within the hairdresser cohort a self-perceived stressful working situation seemed to increase the risk for first planned pregnancy miscarriage risk (OR 1.63; Cl 1.15-2.90)), whereas setting permanent waves increased the risk of ever having experienced a miscarriage (OR 1.44; Cl 1.08-1.93).

SuW08:3 Occupational Health Hazards Associated With Hairdressing

J.Y. Sarpong Health & Safety Consultant OH & ES Management Consult, Tema Gahna

A health and Safety Survey to evaluate the hazards in randomly selected hairdressing saloons In the Communities 1,2,4, and 7 of Tema Municipality of Ghana.

A total of sixty (60) hairdressing saloons were visited using a designed questionnaire From 1999-2000 and an investigation was conducted to unearth the prevailing hazards associated with hairdressing vocation and to identify high risk areas and subsequently institute appropriate mitigating measures to improve upon the current practices.

The survey shows that Alkalis (mostly Sodium Hydroxide), Acids, and Mineral oils in the hair relaxer creams are the most significant chemical hazards. There is high prevalence of severe skin irritations, sores and burns; finger swellings, bruises and abrasions; scalp swellings, burns and sores, eye injuries; hair loss and hair damage.

Failure to use protective hand gloves, ignorance amongst the hairdressers and their apprentices, poor personal hygiene coupled with careless disposal of and drinking from improperly washed empty hair relaxer cream containers contribute immensely to the increased risk of chemical exposure through ingestion.

It was observed that there is the need for the registration of all hairdressing saloons under the Ghana Health and Safety Regulations and the Ghana Hairdressers' Association to regulate and enforce their adherence to control procedures and improved work practices.

SuW08:4 Study On The Neurobehavioral Effects In The Shoe Female Workers Exposed To Organic Solvents

Nguyen Bich Diep et al.

National Institute of Occupational & Environmental Health, Hanoi, Vienam

Recently, the footwear industry is developing rapidly and contributes great part into the national economic income. The footwear companies and enterprises attract a large young labour force, in which female workers constitute approximately 80-90%.

This study evaluated the neurobehavioral changes in female workers with 3-6 years of exposure to organic solvents in adhesives in the shoe manufacturing workshop and compared with an ageeducation matched control group of non-exposed female workers. Some neurobehavioral tests of WHO NTCB were used and concentration of some solvents were measured to evaluate the health effects. The results of study indicated that after exposure to the concentration of Toluene exceeded MAC by nearly two times in some workplaces during workshift, the simple reaction time increased, the short-term memory decreased significantly (P<0.001). The exposed group performed significantly less well than the control group on almost neurobehavioral tests (P<0.001; 0.02; 0.05). Furthermore, they had stronger feeling of negative mood states such as tension-anxiety, depression, irritability and significantly more neurological symptoms (headache, dizzy, loss of strength in legs and arms, difficulty falling asleep) in comparison with the control group. The neurobehavioral changes were more obviously manifested among the workers exposed to higher Toluene concentration: the shoe assembly group had increased number of relatively abnormal test scores than control group (PrR 13.65, $X^2=13.13$, P<0.01) and than sewing group (PrR 5.85, $X^2=3.56$, P<0.05). There was a significant relation between the neurobehavioral changes and increasing cumulative solvent exposure (r=0.24-0.49; -0.36-0.2; P<0.01, 0.02, 0.05). It indicated the large risk related to exposure for neurobehavioral deficits.

The authors recommended some preventive measures to protect female workers' health and to improve working conditions such as control of high temperature and high solvent concentration by installing the ventilation system for all workshop and local exhausted ventilation at workplaces using solvents and providing PPEs (especially respirators) and decreasing exposure time.

SuW08:5 Dolichol As A Risk Marker Of Breast Cancer In Chemical Industry

Sergejs_Kuznecovs)

Public Health Research Foundation, Riga, Latvia

Background. The clinical evidence points to the fact that the raised urinary dolichol (Dol) to 4-5 times may be considered as a tumour marker in breast cancer (BC) control. Carcinogens can induce Dol disturbances in experiment. The aim of the present study was the estimation of occupational breast cancer risk in chemical industry using "urinary dolichol test".

Methods. Urinary Dol concentrations were studied in 286 women-workers contacted with 2-Acetylaminifluorene, DDT, Dildrin, CCI₄, N-Nitroso-N-methyluretane, Amitrole and

Thioacctamide. Women-workers were divided in young (25-40 years old) (1gr.) and old (40-50 y.o.) (2gr.) groups and compared with 278 persons in control. Samples for urinary Dol determination were taken from fresh urine and assayed by HPLC method. The accidences of BC were registered for 5 years.

Results. Mean urinary Dol concentration in women-workers from I group, contacted with chemicals $(23.8 \pm 2.9 \text{ mg/mmol creatinine})$ as well as in II group $(42.5 \pm 3.3 \text{ mg/mmol creatinine})$ was significantly (p < 0.001) higher than that observed in control ($7.4 \pm 0.5 \text{ mg/mmol creatinine}$). During 5 years of observation 18 women-workers from basic groups (6/12) and 4 from control groups (0/4) were diagnosed with different forms of BC.

Conclusions. Based on the data of investigation it was for the first time demonstrated that exposure to industrial carcinogens can induce disturbances of Dol metabolism in women. Urinanary dolichol level was proved to be correlated with potential risk of BC development in women, contacted with chemical carcinogens. "Urinary dolichol test" is recommended by health care NGO as an alternative regular screening for breast cancer with clinical breast examination by doctor or nurse and annual mammography.

SuW08:6 Gynaecological Disturbances among Females Engaged in the Manufacture of Sex Hormones

Mona Sobhy Siha Cairo University, Egypt

Numerous studies have established an association between exposure to sex hormones and many gynaecological troubles. The aim of this work is to detect the different gynaecological disturbances which may affect female workers occupationally engaged in the manufacturing of sex hormones. The total number of female workers was 214, a control group of 220 subjects was taken from the administrative department of comparable age and socioeconomic status and not exposed to any external source of hormones.

All workers were subjected to a questionnaire including present, past, family and occupational history. Gynaecological, obstetrical, sexual and endocrinal histories received special attention.

Gynaecological examination were carried out for married female workers who agreed to co operate with the team (137 exposed), 180 control). Virgins were excluded. Chi square tests was used for statistical evaluation of the results.

This study showed the appearance of masculinizing signs among the exposed group in the form of acne, hair in the face and abdomen, change of voice and body built. There was also positive statistically correlation between exposed and control on comparing gynaecological

disorders as oligomenorrhea, amenorreha, cyclic and acylic bleeding. Hysterectomy was done to 11.2% of exposed workers versus 3.5% of the non-exposed, and 54% of cases of hysterectomy was done before the elapses of ten years of exposure. About 51% of married exposed workers had reproductive disorders in the form of miscarriage, birth defects and sterility (statistically significant when compared to the control.) Gynaecological examination showed that exposed workers were suffering from vulvo-vaginitis (46.7%) cervial erosion (3.9%) leucorrhea (62.8%) statistical significant from the control). About 12% of the exposed workers were complaining of some family

health disturbances in the form of precocious puberty in family children, gynaecomastia in male children and husbands.

We recommend health education for exposed workers, proper orientation for the importance of use of equipment, enclosure of machines. Periodic medical examination should be carried regularly from early detection of affected personnel.

SuW08:7 Breast Changes among Female Workers Engaged in the Manufacture of Sex Hormones

El-Samra GH, El Safty AM, Siha MS and Fathy AS Industrial Medicine and Occupational Diseases. Cairo. Egypt

Numerous studies have established an association between sex hormones and the risk of developing neoplastic diseases. It is well known the relation between the developing of certain neoplastic disorders as cancer breast or endometrium and the level of endogenous hormones. It is quite justifiable to ask questions about the significance of exogenous hormones in relation to such diseases.

The aim of this study is to clarify the impact of occupational exposure to sex hormones on the prevalence of both benign and malignant breast neoplasia.

This work was performed in one of the companies engaged in the manufacture of sex hormones. All workers already present and those discarded were subjected to present, past, family and occupational history. Clinical examination was done, the breast took special attention for the presence of any breast mass ,axillary lymph nodes or the scar of any previous operation. Blood samples were collected for hormonal assay. All pathological reports were reviewed.

Chi square test was used for statistical analysis.

The total number of examined workers in this study was 155 females. Breast changes was in the form of size changes, breast tenderness, increase pigmentation of the areola, hair around the nipple, retraction of the nipple, nipple discharge, scar of previous operation and axillary lymph node. This study showed the presence of 49 cases with neoplastic changes (38 cases showed benign neoplasm and 11 cases malignant) and there was a positive correlation between the neoplastic changes and the duration of exposure. The critical time for the appearance of neoplasia was between 10-20 years of exposure. Breast neoplasia were more common among multipara when compared to nullipara (statistically significant). The prevalence of neoplastic changes were higher in the ampoule sections. This study also revealed a statistically significant increase in estrogen level in both benign and malignant group when compared to normal group.

We recommend periodic medical examination for all workers for early detection of any breast changes, shift of workers away from hormonal exposure after the elapse of 10 years, health education for the proper use of protective equipment, shielding of machines.

SuW09: Occupational Health and Safety, Working Conditions

SuW09:1 Women Worker's Occupational Exposure To Reproductive Hazards – The Israeli Policy

P. Magnus and C Lemesch, Ministry of Labour and Social Affairs, Jerusalem, Ornoy, A, Ministry of Health; Hadassah Medical School, Jerusalem

There is no evidence that exposure to occupational hazards effect women differently than men. However, pregnancy and breastfeeding are periods during which some specific risks to the unborn and the newborn do exist.

Currently recommended standards for occupational hazards are based on protection for both sexes. Nevertheless, it must be considered that exposures levels, acceptable for adult workers, may not be safe for the developing embryo, fetus or newborn when being exposed through placental transfer or through mothers' milk.

Protective legislation exclusively concerning women has been strongly criticised and in some countries is even considered illegal on the grounds of being discriminatory in women's employment opportunities. The dilemma we are dealing with is, how to protect future generations from the hazards of modern technology without restricting equal opportunity rights of the present generation of men and women.

The Israeli Ministry of Labour and Social Affairs decided to adopt the policy recommended by the International Labour Organisation and the European Communities, that is:

A women who is pregnant or nursing should not be obliged to perform work wherethere is a recognized risk to the health of the mother, fetus or child

The recognized risks in Israeli legislation, following maternal exposure during pregnancy or breastfeeding, are:

Some chemicals, such as benzene, cadmium, cytotoxic drugs, ethylene oxide and organic mercury, Physical agents, such as high does of ionizing radiation and conditions under which body temperature may rise above 38.5° C for 4 continuos hours or ore more.

Biological agents – rubella.

When a pregnant women worker is exposed above acceptable levels, to one or more of the chemical or physical agents, the employer must provide an alternative workplace and if there is no alternative available, the woman is entitled to make use of paid leave from work up to delivery. No such paid leave is covered by Israeli legislation during the nursing period. When a woman is employed in a workplace with a high risk of getting into contact with rubella cases (nurseries, kindergartens, hospitals etc.) she must be vaccinated against rubella if there is o documented evidence of previous vaccination.

SuW09:2 Women's Labour and Employment: the Trends During the last two Decades

Sylvie Hamon-Cholet Jennifer Bué, Nicole Guignon, French Ministry of Employment and Solidarity)

During the last twenty years, women's employment structures in France have changed a great deal, keeping certain specific aspects. The main trends are:

- increase of women's employment rate
- growth of part time work
- intensifying of occupational segregation in specific jobs (elementary teachers, nurses, clerks or service workers)
- in the same occupation as men, less recognition of qualifications and less responsabilities for women.

In this context, the national survey on "Working conditions" allows the analysis of working conditions' trends, in terms of gender, through national statistics. Carried out in 1978, 1984, 1991 and 1998, this survey concerns a large sample of the French working population, wage earners or not, in all professions and sectors.

Some characteristics of women's work:

- on average, less physical strains and professional risks than men, and less accidents in the course of employment,
- but some women's jobs are especially exposed to risks and working conditions detrimental to health (blue collars, health professions, service workers)
- many jobs in contact with the public which exposes them more and more frequently to situations of tenseness
- working hours and working time patterns often at variance with social and family life
- concerning work organization, women sustain strong constraint: hierarchy control, visual strains, flexible patterns of time, a lower level of autonomy in work (or autonomy constraint by isolation or a strong disponibility)

The object of this paper we propose is first to analyse trends in patterns of change in women's conditions and organization of work during the last twenty years; secondly, we will consider specifically women's working conditions that are detrimental to health (musculoskeletal troubles, job strain...)

SUW09:3 Workplace bullying among Female Business Professionals: Prevalence and Forms

Denise Salin

Swedish School of Economics and Business Administration

Workplace bullying can be defined as repeated and persistent negative acts towards one or several individuals, which involve a victim-perpetrator dimension and create a hostile work environment. Increasingly, bullying is being recognised internationally as a serious problem in the work environment, as it has been shown that bullying can have severe consequences for both the job satisfaction and the health of victims.

Today, a number of studies have been conducted on bullying. However, gender differences in bullying and the particular features of women as victims of bullying seem to have received relatively little attention. Therefore, the aim of this paper is to study gender differences in bullying behaviour and in particular focus on bullying among women. First of all, prevalence rates of bullying among men and women are analysed and compared. Secondly, it is analysed how and by whom women are bullied. Finally, the study aimed to increase the understanding of how men and women make sense of and describe bullying.

The empirical study was conducted as a cross-sectional survey-study and a questionnaire was sent to 1000 members of a Finnish nation-wide professional organization (SEFE) for employees with a university degree in business studies. The response rate was 38.5% and approximately 57% of the respondents were female. Bullying was measured both with a slightly revised version of the Negative Acts Questionnaire ⁽¹⁾, which measured exposure to 32 predefined negative acts, and by giving the respondents a short definition of bullying and asking them if they had experienced or observed such behaviour. In addition, the respondents were encouraged to describe their bullying experiences in their own words.

As for the results, women reported a significantly higher victimisation rate than men (11.6% vs. 5%). In particular, women reported significantly higher regular exposure rates than men to three negative acts: having gossip and rumour spread about them, being ignored or excluded or being given work clearly blow their level of competence. As for the perpetrators, one gender difference was that female victims reported less instances of being bullied by superiors than male victims. On the other hand, only female victims reported being bullied by subordinates.

The difference in prevalence rates reported by men and women is striking. However, it should be noted that there might be several plausible explanations for this. One possible explanation is that women are actually subjected to negative acts more often than men are. This could possibly be related to perceived power differences between men and women. However, it is also possible that women have a lower threshold for negative acts or that they are more sensitive to interpersonal conflicts in the workplace. Finally, it is possible that men are more reluctant to label themselves as bullied, even when they experience negative acts. The two last explanations were also to some extent supported by the written stories, where men reported mainly only very severe and long-lasting cases of bullying, whereas women chose to describe also "milder" cases.

References

1. Einarsen, S. & Raknes, B. (1997): Harassment in the workplace and the victimization of men. *Violence and Victims*, 12(3): 247-263

SUW09:4 The Effects of Excessive Work on the Health of Women in rural Kenya

Julius Maima Ogola University of Nairoby, Kenya

This study aims at investigating the effects of excessive work on the health of women in rural Kenya.

The objectives of the study are:

- To show how excessive work affects the health of rural women.
- To highlight the problems faced by rural women.
- To recommend possible solutions to health problems facing women.

The introductory chapter gives a background of the regions to be covered in the study.

The second chapter examines the effects of excessive work on the health of women in rural kenya. The subsequent chapters deal with the research design and methodologies used in the collection and analysis of data in the study. The research concludes that excessive work negatively affects the health of women.

Lastly, the study recommends that society needs to stop overworking women.

SUW09: 5 Gender, Aging and Work ability of the Nursing Workers at Emergence Service in Campinas, Brazil. Preliminary Results.

Maria Inês Monteiro Cocco, Duran,; Erika C. Marocco, Universidade Estadual de Campinas; Nursing Department- UNICAMP

Introduction

Changes in the world originated from economic and informational globalization are increased, at the last years, in the development countries, similar to Brazil, a Latin America country, creating different challenges to the work health promotion.

The work and life conditions are so hard in development countries.

Objective

The aim of this study was to evaluate the perceived work ability of nursing staff – registered nurses and auxiliary – of a university hospital in Brazil. There are the preliminary results.

Material and methods

Survey was carried out in university's hospital (public), with 40 women - nursing workers -15 (37.5%) registered nurses and 25 (62.5%) nursing auxiliary in Brazil.

The authors utilized the Work Ability Index – WAI, developed by Tuomi et al – researchers of the Finnish Institute of Occupational Health – Finland.

The data were collecting in the hospital, during the work schedule.

In this study we presented preliminary results in relation to work ability: perceived work ability, that was asked in relation to life best (scale 0-10); number of diseases with physician's diagnosis and worker own opinion; physical activity (out of the work) and leisure time activity.

Results

The mean age was 38.6 years, with a variation of 23 to 53 years. Forty five percent of the workers were on shiftwork. The mean time worked in this workplace was 8.4 years. The worktime per day average was 6 hours and twenty minutes for day workers and 12 hours for shiftwork (3 nights per week).

The mean value of the perceived work ability was 7.7, on a scale from 0 to 10. Fifty percent of the workers related had a disease diagnosed by a physician: musculoskeletal and cardiovascular diseases and slight mental disorders.

Sixty percent of the workers didn't realize physical activity; that corresponding to 40% among nurses and 72% of the auxiliary nursing.

All women related at least one activity during their leisure time.

Final considerations

The preliminary results showed a high mean age, important percentage of worker with a disease diagnosed by a physician and reduced number that realized physical activity out of the work. These factors are very important to maintain the work ability; measures to improve work ability promotion are necessary.

SuW10: Health Related to Gender and Class Aspects, 2

SUW10: 1 Heart Disease Changes Working and Living Conditions. Is there a Gender Difference?

Hochleitner Margarethe MD, Angelika Bader MD University Hospital Innsbruck, Innsbruck

Heart disease diminishes work capacity and quality of life in all patients. This is especially true for heart surgery patients. Can we prove a gender difference in these patients?

We conducted a prospective study at our heart surgery department for one year, namely 2000. All patients who underwent bypass grafting or valvular replacement were enrolled in our study. All these patients were interviewed with the same quality of life questionnaire. A total of 265 patients were enrolled in our study; 253 (95.5%) answered to our questions. Our study group consisted of 74 (29.2%) women and 179 (70.9%) men. Mean age was 68.39 for women and 64.46 for men. (It is well known that more men than women undergo heart surgery, and that women receiving heart surgery are always older than men.)

Only minor gender differences were documented for restrictions in physical well-being, sports, holiday, friends, family life. There were also small differences in changing smoking habits and food intake. On other issues we found major differences: Sleep disorders: 74.3% of women vs. 59.2% of men, Fear of death: 71.6% of women vs. 55.3% of men, Depression: 58.1% of women vs. 33.5% of men; Negative effects on: Leisure activities: 85.1% of women and 67.0% of men, Sex life: 20.3% of women and 58.7% of men, Household activities: 87.5% of women and 30.0% of men.

A total of 18.8% of the women and 24.8% of the men retired because of heart disease. Nevertheless, we have to take into account the mean age of our study group (65.59 a) and the fact that the retirement age in Austria is 60 for women and 65 for men. Most people do not even work that long. Moreover, many more women work part-time than do men.

Following heart surgery we found in both sexes restricted physical capacity, as anticipated. We also found major gender differences in some aspects. The leading difference was seen in housework, followed by sexual activity and depression. The reasons for these findings are not documented, but we know that in our country men do not share housework chores at all. Thus, it is difficult to document any restriction. Sex was a crucial issue for our interviewers. Men really liked to answer this question and told us a lot of stories, not always really correlating with their heart indices. Contrarily, women disliked this question very much. For example, one answer was: "I've been a widow for thirty years." Thus, this difference seems to be based mainly on sociophychological factors. Depression occurs twice as often in women as in men in Austria, and insomnia and fear of death have to be seen in this light. The women in our study were older and their cardiac health was poorer as compared to the men in our study group. The working and living conditions of both sexes deteriorated due to heart disease, and the impressive differences in some aspects were more likely based on sociophsychological differences in our society than on heart indices.

SUW10: 2 Gender Mainstreaming Health Care - Can we Prove any Benefit in Cardiology?

Margarethe Hochleitner University Hospital Innsbruck, Innsbruck

Gender mainstreaming in health issues is a policy legally anchored by the Austrian Government and the EU. Many papers and talks have dealt with this topic. Do women really benefit? Can we prove that any change has taken place in our health system? Heart death is the number one killer of women worldwide, except in sub-Sahara Africa. So, what happens in cardiology?

We conducted a prospective study of coronary angiography, admission to bypass surgery, for Tyrol, Austria, throughout the year 2000 and compared these data with those from the time prior to gender mainstreaming, namely 1995. After 1995 the capacity of the catheter lab was doubled. We also compared the official mortality and population statistics for Tyrol.

In 2000 688 (32.5%) women and 1429 (67.5%) men underwent coronary aniography. In 1995 far fewer women, namely 332 (33.9%), and men, namely 646 (66.1%) received CA. The demographic data show hardly any change for this five-year span: in 2000 341,197 (51.1%) female and 326,566 (48.9%) male inhabitants lived in Tyrol, while in 1995 these figures were 335,817 (51.3%) females and 318,296 (48.7%) males. The mortality statistics for 2000 show 1104 (58.2%) female and 792 (41.8%) male heart deaths, while those for 1995 show 1008 (53.5%) female and 875 (46.5%) male.

In conclusion, women in Tyrol did indeed benefit from gender mainstreaming and our promotional activities: twice as many women underwent angiography in 2000 as compared to 1995. During the same period the population index did not change very much, but the mortality statistics showed an increase in female and a decrease in male heart deaths. Thus, to date gender mainstreaming in health care has increased the number of coronary angiograms performed in all patients, even women, but did not improve the referral bias against women. To the contrary, we even found a decrease in the percentage of coronary angiograms performed in women. Of course, sociopsychological changes need much longer than five years, and the same is true for their influence on mortality statistics. So let's hope for the best!

SUW10: 3 Linking Gender, Psychological Well-Being, Physical Symptoms, and Perceived Total Workload

Leeni Berntsson, Petra Lindfors and Ulf Lundberg. The Nordic School of Public Health, Göteborg and Stockholm University

Health psychology has come to focus on the negative, such as psychological disorder or physical disease, and has consequently neglected positive psychological phenomena including mental health and well being. To study the linkages between health, ill-health, and total workload (including both paid and unpaid work) in women and men, the 18-item measure of Ryff's Psychological well being Scales (RPWB) covering six dimensions of well-being (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance), an inventory of physical symptoms, and a scale assessing perceived total workload were included in a questionnaire.

Questionnaires were mailed to stratified samples including white-collar working women and men from four occupational areas: technology and natural science, education, health care and administrative work. Women and men were matched for age, occupational level and family situation. Analyses of data obtained from 743 women and 595 men, aged 32 to 58 years, revealed that women scored significantly (p<0.0001) higher on perceived total workload, stress and conflict

between duties, as well as on control over household. Women had also significantly higher scores on self-acceptance, positive relations, personal growth and purpose in life. In contrast, men had significantly higher scores on environmental mastery. Self-acceptance, positive relations with others and environmental mastery were negatively associated with perceived total workload, stress from paid work and conflict, and positively associated with control over household work among both genders. For men, autonomy and stress from paid work and conflict between duties respectively were negatively correlated. In accordance with prior findings, women reported more physical symptoms, including headaches, stomach complaints, sleeplessness, dizziness, backaches, loss of appetite, and pain in the neck and shoulder area, than men (p<0.0001). As expected, symptom reports correlated negatively with all dimensions of RPWB. The finding shows that lower levels of psychological well being are associated with high-perceived workload and physical symptoms. However, the findings show that compared to men, women report higher levels of psychological well being though they score higher on perceived total workload and report more physical symptoms.

SUW10: 4 Does Social Support Influence the Work-Family Conflict? A Test of two Models.

Geertje van Daalen, Geertje van Daaten, Karin Sanders and Tineke M. Willemsen Tilburg University The Netherlands

Recent efforts to understand how people balance their work and family responsibilities consider the influence of social support. Most of these studies examining the work-family conflict and social support have two major weaknesses. First they mainly concentrate on the work-family conflict, paying less attention to social support. Second social support is operationalized differently in various studies due to difficulties regarding the conceptualization of social support.

These weaknesses make it hard to compare the results of various studies in a reasonable way. Another more general weakness of research concerning work-family conflict and social support is that although it is clear that the work-family conflict and social support both are likely to be related to domain specific as well as to general measures of health and wellbeing, it is not known how they are related. In the present study we examine the relationship between social support, the workfamily conflict and health and wellbeing outcomes from a more 'social support point of view'. This means that besides attention to the work-family conflict, health and wellbeing, attention is paid to both the different sources- and types of social support. To examine this relationship we test the two most common used models regarding social support in one single study. One model represents social support as a moderator between the work-family conflict and wellbeing and health. Here the expectation is that an individual who receives little social support will experience more strain, more health problems and will have a diminished well-being compared to an individual who receives more social support. In the other model social support is represented as having a direct effect on the work-family conflict and the work-family conflict in turn directly influences well being, health and stress. Here the expectation is that if an individual receives more social support this will automatically result in an increase in both wellbeing and health, and a decrease in the stress level of this individual. Besides testing the two models we also examine if there are any gender differences regarding social support for both the work and family domain, while in the social support and workfamily literature there is no agreement on gender differences in the use and need of social support. The relationship between social support, the work-family conflict, health and wellbeing will be studied among 2000 Dutch households, which members participate weekly in a panel survey through a telepanel.

SUW10: 5 Sleep complaints increase the risk for recurrent events in middle-aged women with coronary disease

Constanze Leineweber, Imre Janszky, Göran Kecklund and Kristina Orth-Gomér Public Health Sciences, Karolinska Institute, Stockholm, Sweden

Disturbed sleep has previously been related to work stress and may be an important mediator of the relation between stress and disease. Thus, as long as sleep is not seriously disturbed, the tolerance to work stress may be acceptable and disease development can be prevented. Disturbed sleep has been found to increase coronary risk, which is an important cause of long-term sickness and job absence in both men and women. Under the age of 70, women with coronary disease have poorer prognosis compared to their male counterparts and so even a lower probability of returning to work. We examined the impact of sleep complaints on prognosis, taking into account both standard risk factors and depressive symptoms.

We followed all female residents of Stockholm, aged 65 or under, who were admitted with an acute coronary syndrome between 1991 and 1994, over five years for recurrent events (n=292). Sleep complaints and depression were measured at baseline using standardized questionnaires. The sleep questionnaire, which was answered by 283 women, assessed quality of sleep, restorative function of sleep and snoring.

Poor sleep quality was associated with recurrent events including cardiovascular mortality, acute myocardial infarction and revascularization procedures. Adjusting for age, body mass index, symptoms of heart failure, hypertension, diagnosis at index event, diabetes, HDL-cholesterol, triglycerides, smoking and education, the hazard ratio for women with poor (upper quartile) as compared to good (lower quartile) sleep quality was 2.5 (95% CI: 1.2-5.2). Women who did not wake up feeling well rested had a significantly higher risk of recurrent events after multivariate adjustment (HR=2.4; 95% CI: 1.2-4.6). Women with depressive symptoms have previously been shown to have a poorer prognosis than non-depressed. We found that women with both depression and poor sleep quality had 66 % (95% CI: 59%-73%) event free survival compared to 83 % (95% CI: 69%-97%) in women without any of these complaints. Heavy snoring was not related to depression or to prognosis.

Our results indicate that poor sleep and not feeling well rested predict poor prognosis in female coronary patients. The prediction was further strengthened when adding depression. Treating the sleep problems may increase the possibility to return to work.

SuW11: Gender Sensitive Theories in Research on Work and Health

SUW11:1 Body, Gender and Work Organisation – The Relationship between Doctors and Nurses

Karen Davies PhD Docent Lund University, Sweden

Social Theory and not least of all feminist theory have shown considerable interest in the body in recent years. From a sociological perspective the physical and constructed body have proven to be useful analytical tools in contributing to an understanding of how social relations related to gender and class are in part established and maintained. For feminists, the body has been an important site for analysing political and economic discourses of power. Furthermore, resting on a Goffmanesque tradition, the body is indispensable in understanding processes of social interaction where gender is re-enacted again and again and notions of masculinity and femininity are constantly reworked.

Hospitals are organisations where the relations between doctors and nurses can be problematic, affecting the psycho-social climate and health. Women doctors may receive poorer (or better) service from nurses than their male counterparts; nurses (as collective) may still feel subservient to doctors (as a collective) despite efforts at professionalisation.

Understanding hospitals as *gendered* organisations may help us understand why this is the case. Bringing in the body as an analytical tool further aids our ability to comprehend the gendered relations at work. I would argue that there are (at least) three ways in which we can introduce the body into our examination of the relations between different professionals in hospital work

- 1) Gender is inscribed on the body. I would contend that we never interact with each other as genderless beings, although we may very well take gender for granted and its importance may possibly be most salient in initial encounters although not necessarily. A nurse, then never just interacts with a doctor it is a female doctor or a male doctor and this makes a difference. "Doing gender" is accomplished in these practices.
- 2) Doctors and nurses belong to two different *collective bodies* where values, knowledge, training, methods of working, etc differ. The professions embody historical constructions of masculinity and femininity which in turn have influenced how members of each corps have seen and worked with the other and how they approach each other even in the present day.
- 3) There is the question of *situatedness* where (hospital staff) bodies find themselves on the ward and in the hospital in the daily run of things. Space and place are not neutral but are linked to relations of power and gender.

Utilising the body in these ways provides us with analytical access to the very complicated and multileveled relations at work at the crossroad of gender, profession, hierarchy and bureaucracy. While I have examined these questions especially in relation to hospital work, I assume that the framework is relevant for other work places where different professions or occupations interact.

Applying the body in these ways in our empirical analyses demands qualitative methodological approaches that are furthermore linked to our own bodies; namely it is from the standpoint of our own presence, or bodies, that the research can be carried out. Our bodies are implicated in the

research findings and interpretation. In other words, it is an embodied knowing. This, of course, differs from a positivist position.

SUW11:2 Women's Participation in Public Life Management Development Programmes

Sara W. Mungthi

Ministry of Labour, Directorate of Occupational Health and Safety Services, Nairobi Kenya

In Kenya. women from all walks of life are organizing themselves for change. Some are educated and others illiterate. Others are housewives, workers, managers and professionals. They are alert to respond to the new trend in technological and social-economical development changes that have adversely affected their health and living conditions.

Some women groups have done inventory of women groups in the country with the aim of establishing progressive management development programmes in their communities and public services. It has been discovered that initiatives developed by women are potentially stronger, more adaptable, and more a sustainable than those implemented on their behalf.

At the workplace management development for women managers is essential in. order to influence policy, development authorities for effective recognition and support on women's issues to enhance women's health and safety needs and promote production. The world market demands products manufactured in human working conditions and that human factors are very important in the design of work systems and in the safe and effective use of these systems.

The Paper will highlight on;

- 1. Factors contributing to women's non-participation in management development programmes; based on a survey at the workplaces.
- 2. Types of women groups an d organizations.
- 3. Women's initiatives for change towards self-esteem, evaluation and their effects...
- 4. Underway strategies for future plans implementation.

SUW11:3 A Feminist Research Approach to the Impact of Unemployment on Psychological Health

Evanthia Tazoglou

Aristotelion University Of Thessaloniki, Greece

The international literature on the effects of unemployment has indicated that its multi-dimensional impact is of great importance for the psychological well-being of the unemployed people. It is well established that there is a strong causal link between unemployment and negative psychological health. A theoretical explanatory framework of unemployment experience has been developed and empirically investigated by researchers of different theoretical approaches: M. Jahoda (Function deprivation theory, 1979,1982), N. Feather (Expectancy-Value theory, 1990) and D. Fryer (Personal agency theory, 1986).

Most psychological research on unemployment focus on male individuals; women consist an understudied group in unemployment literature and their modes of thoughts and experiences as directly involved parts in unemployment status -and not as spouses/mothers/etc of the unemployed-have been inadequately investigated in the past. Understanding unemployed women's feelings and exploring women's voice would provide a useful alternative insight to unemployment experience.

In this paper I will discuss how the particular structural, socio-economic parameters and cultural factors influence the different way of looking at unemployment in relation to gender: How does the unemployment experience differ for men and women? I will identify the structural subordination of women within the patriarchal system and describe how women are affected most by the new "flexible market" (less well paid jobs, part-time jobs, low status jobs, lay-off in case of economic recession). I will then provide a critical understanding of the social context and dominant cultural patterns; an analysis of the symbolic and pragmatic value and meaning that un/employment has for men and women.

I will conclude by considering that there is need to adopt a feminist orientated research perspective and develop a critical, alternative research approach against mainstream -"malestream"-conventional research designs in order to broaden the traditional assumptions underlying the relationship between unemployment and mental health and offer an insight into the women's perspective.

SUW11:4 Measuring empowerment in working women

Madeleine Jeanneau, Agneta Bergsten Brucefors Women's group, Unit of mental health, Stockholm Centre of Public Health, Stockholm City Council

Background

The mental health situation of women in the Stockholm County Council has deteriorated in recent years and the situation can be described as more than troublesome. One way of accounting for it is by looking at ill health figures: women have generally higher figures than men, and seen across the whole of the 1990's these figures have continuously risen in an alarming way. Data from Statistics Sweden show that the very long periods of sick leave, of more than 365 days, increase the most. Several questions arise from this situation: What are the reasons for this widespread mental illhealth? Why are women more struck than men? What can be done to alleviate the situation? What efficient preventive measures can be found? What can women do themselves?

Objective

A key concept is that of 'empowerment', in this research operationalised as women's strength, integrity and ability to take control over their own lives and their desire for change etc. This research is about developing an instrument to measure empowerment in order to find a means to better grasp the specific characteristics of women who suffer burnout and mental illhealth - and whose who contrary to these women do not. A large majority of women are in good mental health and an objective of this study is to map out and describe the buffering factors that help women to stay healthy in spite of troublesome life situations and difficult work conditions.

Research questions

The specific research task is to create a questionnaire to measure empowerment, to test it in a pilot-study and to report its statistical properties. The overall aim is to create an instrument that can be used for large groups of women in epidemiological studies. One research question is to discuss the deep meaning of 'empowerment'; another is how to operationalise the concept in terms of questionnaire items. A third important issue to create an instrument that stands out from other known instruments, which measure phenomena, like self-esteem, self-image, burnout, etc. We want an instrument, which addresses specific women's issues and gender-related themes.

Method and participants

The first step will be a pilot-study where items are tried out. Approx. 100 women will be asked to complete the questionnaire with about 100 items meant to describe different aspects of empowerment. For this study we will address staff working within the public health care sector in Stockholm, and for comparison reasons we will also include men. Data will be subjected to standard statistical procedures: factor analysis in order to obtain reliable and meaningful dimensions of the empowerment concept, group comparisons, correlation analyses etc.

Ethical consideration

Ethical committee will review the project.

Results: The results of the pilot-study will be presented at the conference

SUW11:5 Equality Planning as a good Example to promote Gender Equality at Work

Kajsa Kauppinen

Finnish Institute of Occupational Health)

The Act on Equality between Women and Men stipulates that equal opportunities at workplaces must be advanced purposeful and systematically. Workplaces with more than 30 employees are required to write up the measures they intend to take for promoting gender equality, ultimately diversity. The purpose is to create a positive workplace atmosphere and to support equal career opportunities and pay for both women and men.

Material and Methods

The equality survey was conducted to explore corporate attitudes to and resources for promote equality between women and men as part of the overall development of work life. The sample (n =500) was a range of Finnish companies with over 30 employees picked from the company register covering the whole country.

Results

Over half (56%) of the companies had no woman in a senior management. In numerous companies, women were in the majority on the worker level, and particularly in the office duties. There were significantly more women in the middle management and independent expert jobs than in senior management. Only a few women seemed to have broken through the glass ceiling. According to the survey, equality atmosphere improved the level of the staff motivation. It was also considered to improve the corporate image and to increase innovation. There was a high correlation between the level of equality and organisational justice.

Conclusions and Discussion

In Finland, larger companies with over 500 employees have been the forerunners in developing gender equality at work. Smaller enterprises consider that equality is best achieved spontaneously, without any special measures or outside pressures. It is important to see how equality or diversity are integrated into the various work organisations and how they change their working cultures. It is

also imperative to illustrate the economic benefits resulting from equality, diversity and organisational justice to the business world.

SUW11:6 Revisiting Women in Law, Medicine, Engineering and Architecture: Work Relations, Class Relations Gender Relations

Karen Giffin and Maria Das Gracas Rabelio National School of Public Health, Rio De Janeiro, Brazil

In the 1970's studies of women in male-dominated professions in 'developed' generated concepts such overload, role conflict or strain to characterise the difficulties of combining work in such professions with family life. At present international studies conclude that the problems of stress and burn out are now global problems, with the, degradation of work in present-day societies which adept a neo-liberal 'minimal' state and reduction of public services also increasing differences between women of different classes. In such conditions, the need to conciliate work and family is one of the major points of women's distress.

In 1975, a case study in women and development, which included analysis of the 1970 Census data, revealed that all university-level professions in Brazil had a higher proportion of women, compared to Canada or the USA; within Brazil, lesser industrialised regions showed a stronger female presence in these professions when compared with more industrialised regions. In-depths interviews with 50 women in the professions of law, medicine, engineering and architecture in one of the less- industrialised regions of Brazil revealed that these women did not experience overload, role conflict, or strain in the conciliation of work and family demands. The feminist movement had not yet arisen in Brazil, and the majority of these women many of whom came from modest or even poor backgrounds, were encouraged by their families to enter these professions to guarantee their economic future. Despite the fact that these were traditionally male professions in Brazil, this was not generally perceived as problematic, either from the point of view of female identity or in the terms of possible family/work role conflict or strain. Several factors which favoured women's entry into these professions and facilitated the conciliation of work and family duties were identified, including part-time jobs in the public sector, the proximity of other family members and the wide availability of cheap domestic service. (Giffin, 1979)

The present study aims at investigating changes that occurred in the last 25 years in the work situation and views of such professionals. During this time, industrialization and urban growth have advanced considerably in this region and the effects of 'structural adjustment' policies are being felt, with all but the elite suffering new economic constraints in a situation of growing unemployment.

In-depth interviews, using the original interview schedule, were carried out in 2001 with a random sample of 50 women lawyers, doctors, engineers and architects who entered these professions in 1980 on. Analysis reveals new configurations in the organization and 'flexibilization' of work in these professions, now situated to a much larger degree in the private sector, which reflect directly on the conciliation of home and work duties. Data on class background, family composition and relations, professional relations, and gender ideologies, illuminate how changes which occur in the organization of work and public services reflect on class and gender relations within the family, producing, among other important and interrelated effects, increased stress for women in these professions.

Giffin, K 1979 Opportunities and kleologies; Women in High-Status Professions in Bahia, Brazil; Docotral Thesis, University of Toronto Canda.

SUS06: Gender and Working Conditions in an Enlarged Europe

Chair: Elisabeth Lagerlöf

Organiser: European Foundation

SuS06:1 Gender and Working Conditions in an Enlarged Europe

Sabrina Tesoka

European Foundation for the Improvement of Living and Working Conditions
In 2000, the Foundation carried out its 3rd Survey on the working conditions, health and well-being of the employed in the fifteen EU Member States and Norway. The information was collected from individual workers in face-to-face interviews, in which they were asked to describe a number of aspects of their work and workplaces through a series of structured questions. Two previous surveys were carried out in 1991 and1995/6 that permit an analysis of trends in some working conditions, and this latest survey has been expanded to include a much wider range of issues.

In 2001 the Working Conditions Survey was extended to 12 Candidate Countries to the EU (thereafter CCs): Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Romania. The survey is identical to the Working Conditions Surveys carried out in the EU in 1990, 1995 and 2000. This enables to draw some comparisons between EU countries and candidate countries. Obviously one should keep in mind possible structural differences when comparing countries or group of countries. Some of these differences will be presented during the symposium. The survey questionned, in face to face interviews, a representative sample of workers in each candidate country (1.000 workers in each country, except for Malta and Cyprus, 500) to provide a total sample size of 11.000 interviews. The weighting has been done on the 2000 Labour Force Survey in the candidate countries (Eurostat). The survey adresses a wide range of issues related to the quality of work and employment, such as:

- Physical risk factors (noise, vibrations...);
- Working time patterns (working hours, shift and nightwork...);
- Work organisation features (job content, pace of work, autonomy...);
- Social relations (consultation, support...);
- Occupational health outcomes (stress...).

The data set enables multiple correlations and secondary analyses on such issues as the possible relationships between gender and working conditions. The Foundation's report on Gender and Working Conditions in the EU, to be published in 2002, examines the gender pattern of differences and similarities in working conditions in Europe. The Foundation also intends to investigate the possible relationships between gender and working conditions in 12 Candidate Countries. As indicated by the primary results of the Working Conditions Survey, gender segregation, whether horizontal or vertical, does not seem to be as significant in the Candidate Countries. Although segregation remains, there is a more even distribution of women between the different job

categories. Women in the Candidate Countries are also more likely to be in a higher hierarchical position than their EU counterparts. For example 59% of respondents report a man as their immediate boss (64% in the EU) and 25% a woman (19% in the EU). And 15% of men report a woman as their boss, compared to 7% in the EU. There are little CC-EU differences in the proportions of workers exposed to violence, intimidation and various discriminations. The only notable difference is the inverted rate of exposure to intimidation (more men than women in CC). A reflection of lesser segregation (and less widespead part time), a higher proportion of women is to be found in the higher income bracket and conversely a lower proportion in lower income brackets.

The objective of this symposium is to discuss the results of the Foundation's surveys on Working Conditions in the EU and in 12 Candidate Countries from a gender perspective and investigate some key-hypotheses in order to elaborate a qualitative interpretation of the statistical data collected by the Foundation for those countries.

SuS06:2 Twinning means "working together as equals"

Kaisa Kauppinen (A), and Ülle-Marike Papp (B)
(A) Finnish Institute of Occupational Health, Helsinki, Finland and (B) Ministry of Social Affairs, Tallinn, Estonia

The Estonian-Finnish Twinning Project on Occupational Health was one part of the Estonian accession process into the membership of the European Union. One of the key elements was ensuring gender equality in work life in Estonia.

The Estonian labor market has undergone rapid structural changes during the 1990s . The changes, with heated competition and 'atypical work forms' put new demands on people's adaptability and coping skills. These changes affect both women and men, but women are particularly vulnerable.

•The equality element

The equality element was based on the new framework strategy of the European Union on gender equality in 2001-2005. According to the strategy, equality should permeate all areas of actions in the EU enlargement process. Equality element aimed at enhancing and complementing the accession process by providing new incentives for promoting gender equality in Estonia.

One of the objectives was to produce new information for awareness raising and capacity building. Therefore, two company-based surveys were conducted in Tallinn. In both surveys the Healthy Work Organization barometer was used. It was supplemented by questions measuring gender equality. The Finnish Gender Barometer of 1998 was used as a model. For the first time in Estonia, gender-related issues were fully integrated into the study of work organization and work practices. The objective was to increase gender sensitivity when creating a healthy culture within work organizations.

•Results

The results show that it is vital in Estonian workplaces to create new ways to promote a better balance between work and family life. The birth rate has significantly dropped in Estonia, being today one of the lowest in the world. Because of a lack of 'family-friendly' practices young women find it difficult to have children if they pursue their careers at work. A 'family-friendly' workplace

can be a new competitive factor when employers are competing in hiring and keeping the best people.

SUS06:3 Women's right in the Candidate Countries

Eva Eberhardt

The political and economic transitions in the Candidate Countries have had a substantial and far reaching impact on the lives of women. The accession process, facilitating the entry into the EU, brought the equality "acquis" more into focus in the candidate countries and has thus, further expanded the existing basic legal structures providing "de jure" equality for women. However, persisting inequalities and the lack of "de facto" gender equality point to deeply rooted structured and societal attitudes, which are dominant in Candidate Countries societies. The manifestation of these structures and traditional perceptions of women's role are clearly visible in, among other things, the stabilised labour market segregation with its sectoral concentration of female labour; persisting pay differentials; limited career plan (glass ceiling) and in the importance of family/marital status for both women and men in their employment/career achievements/developments.

This paper/workshop will assess recent trends affecting the lives of women in some of the candidate countries and will attempt to propose key questions in the debate on equality and gender roles for both the EU and Candidate Countries.

SuS07: Gender Budgeting

Organiser: Angpanneföreningen/National Institute for Working Life/Ministry of Finance/Department for Gender Equality Affairs

SUS07:1 Can the budget process improve equality between women and men?

Catharina Brottare Schmitz ÅF-International Stockholm, Sweden

Are today's budget allocation, planning and decision processes in the public sector, hindering equality or cementing inequality?

Gender Budgeting was introduced in the public sector in Australia in the beginning of the 90^s, as a means of trying to through the budget process; improve women and men's quality of life. Since its start Gender Budgeting has been picked up as a methodology by various countries, where among others South Africa has been very active. The Commonwealth is also supporting six pilot countries, many development countries are introducing the concept and even the western world is recently showing interest in the concept and starting to discuss if or how it can be introduced in their budget process.

Budgeting with a gender perspective is a process of mainstreaming gender into every aspect of the budgetary planning process, including preparations, planning, stakeholders' analysis, and monitoring and expected impact of the budgeted activities. A gender sensitive budget is a budget that takes into account the contribution made by all groups in the society. It recognizes the contribution of unpaid labour by women and men, which forms a big percentage of the national economy. Gender sensitive budgets have a thorough budget analysis, look at the composition of revenue and expenditure, whether what is collected is shared equally, whether it is efficient and whether there are effective delivery services which accommodate the interests and the needs of the society. Gender Budgeting enhance a more equal distribution of recourses towards women and men and recognizes that men and women have different needs with should be reflected in the planning and budgets.

This seminar will give theoretical aspects as well as examples of implementing activities on gender budgeting. We, ÅF-International has been supporting a development financial management project at the Ministry of Finance in Tanzania where gender budgeting has been introduced, experiences from this project will be presented. The workshop will also describe discussions ongoing in the Swedish public sector on gender budgeting. Time for discussion will be given in the seminar.

This seminar is a meeting between theorists and practitioners who has been working with the gender budgeting concept as a way of improving gender equality.

SuS08: Balancing work and family life – a health related issue

Chair: Kerstin Isaksson

SUS08:1Balancing Work and Family Life: a Health related Issue in the Life Course of Women

Kerstin Isaksson and Gunn Johansson National Institute for Working Life

Multiple roles in family and work life were earlier mostly seen as causes of stress of working women. During the last decade research has shown a more complex picture. Spillover can be both positive and negative and effects are sometimes reciprocal. Balancing demands from work and family have become questions under debate. For females, reports of positive spillover from work to family have been more common than for males. Critical research issues for the future concern health effects of work-life balance for women e.g. to clarify conditions when the family can be perceived as more of a source of satisfaction than of stress and when multiple roles can be beneficial for womens health and well-being.

The aim of the symposium is to present on-going research on how females balance demands from family life and work with their own personal ambitions and how the reconciliation of this balance effects on well-being and health of women..

The studies presented could be either theoretical or empirical but should use longitudinal data and have a life course perspective on the balance of family and work life.

SUS08:2 Balancing Women's Life Contexts: Prokop and Swedish Life-Line Studies

Gunilla Bjerén

Forum för kvinnoforskning, Stockholms Universitet

In the middle of the 1970ies the German Sociologist Ulrike Prokop published *Women's Life Context: On limited Strategies and Unmeasurable Wishes*, a very influential book drawing attention to the importance of understanding women's working life behaviour in the context of the entire life experience of women. In this paper, I want to reread *Women's Life Context* in the light of subsequent Swedish studies of the lifelines of women from different cohorts. Are the "problems" addressed by Prokop, such as the supposed half-hearted interest in working life and career of women, still relevant today? And can the possible solution to these problems be related to women's health?

SUS08:3 Balancing Careers and Well-Being: Women's Work/Family Spillover, Energy and Stress

Phyllis Moen & Patricia V. Roehling (presented by P. Roehling) United States

Drawing on life history and longitudinal data derived from over 800 dual-earner couples we explore gender differences in the job- and family-related predictors of work-family spillover and the relation of spillover to well-being. Specifically, we examine how "work-friendly" practices such as telecommuting and part-time employment are related to levels of spillover and whether this relationship is affected by gender, life stage and parental status. We also examine the continuity and change of work-family spillover over time and how continuity affects well-being.

SUS08:4 Balancing Women's Occupations in Middle-Age as related To Work-Life Balance and Subjective Health and Well-Being

Siv Lindroth, Kerstin Isaksson, Gunn Johansson & Magnus Sverke National Institute for Working Life, Sweden

This paper focuses on middle-aged women, working in different occupational fields. The aim is to describe well-being, subjective health, and perceived work—family balance, using data from the Swedish IDA-program (Individual Development and Adaptation). The main cohort in the IDA-program, born 1955, has been followed over the school years, with a follow up at age 26. In 1998, at the age of 43, a new data-collection took place, now focused on women's health, work, and education in a life-span perspective. The present analysis is based on the women's occupational histories (e.g., percentage full-time work, part-time work, study and parental leave) as well as occupation at the age of 43. The results are discussed in terms of employment structure and work/family orientation.

SUS08:5 Balancing Timing of Childbirth and Education: a Life Event Approach to Female Career Patterns

Kerstin Isaksson, Gunn Johannson, Siv Lindroth & Magnus Sverke National Institute for Working Life, Sweden

Research on career patterns has presented a number of theoretical models, each of which highlights slightly different aspects. Although these models are implicitly assumed to be of general validity, they are usually coloured by their cultural, ethnical and historical background and by a lack of gender perspective. A review of research on women and career development (Philips & Imhoff, 1997) concludes that the research in the last decade took important steps towards capturing the complexity of female career development. Still, there are some critical gaps in research. The general aim of this paper is to describe female career patterns in terms of shape, level and stability. A special emphasize is how career patterns are affected by timing of childbirth and other life events. Finally, the patterns are related to satisfaction and the perception of work –family balance. Data were taken from work histories in the interviews of a sample of Swedish women aged 43 (n = 120)

as part of a longitudinal study of school children followed since age 10. Career patterns were plotted on the basis of life events in three areas (education, family and work). Results indicated relative stability of labour force participation but not in work hours. Continuous full-time work (from 16-43) was very unusual and almost exclusively limited to women without children. Career progress in terms of moving to higher career levels was another common feature of the cohort.

SUS08:6 Balancing Stress, multiple roles and coronary disease in Stockholm women

Kristina Orth-Gomér Karolinska Institute, Sweden

Coronary disease, clinically manifest as myocardial infarction or angina pectoris, is almost as common in women as in men, but occurs about 10–15 years later in women's lives. This is true, even after control for age and risk factors such as smoking, elevated blood lipids and blood pressure. Once a woman gets coronary disease, however, her prognosis is poorer and she is less likely than a man to get rehabilitated, at least if she is under age 65. Possible causes for this gender difference include the chronic and daily stresses of work and family roles, which may add to the burden of standard physiological risk factors in women.

We have investigated these issues in the Stockholm Female Coronary Risk Study, a community based case control study of women of productive ages (aged 65 and under), who were admitted with acute coronary disease to intensive care. These women were compared to an equal number of healthy women, of the same age, who were obtained from the general Stockholm population. Emotional stress from dyadic relationships was assessed by the Stockholm Marital Stress Scale and work stress, by the demand/control stress model. Standard risk factors, including life style (smoking, lack of exercise, poor diet, obesity) and physiological measures (blood pressure, blood lipids and clotting factors) were assessed with standardized biomedical methods.

We hypothesized that women who, at the same time, experienced longstanding and severe marital and work stress may be at greatest risk of coronary disease, whereas women with only one type would be at intermediate risk. Controlling for age and standard risk factors, women, who reported both types of stress had a tenfold increased risk of coronary disease (HR=10.2; 95% Cl 4.4-23.6). Women who reported either family or work stress had a 4-fold risk as compared to women without stress.

About one third of women patients reported marital and work stress concomitantly. Life table analyses of event free survival rates over five years in women with coronary disease, suggested that the major burden of stress experience was due to marital rather than to work stress, and that synergistic effects were generated when both types of stress occurred together. It is concluded, that women with multiple sources of stress are at greatest risk of serious life threatening illness such as coronary disease.

SuS09: Women and Energy in Developing Countries

Chair: Jyoti K. Parikh

SUS09: 1 Perspectives from Developing Countries

Jyoti K. Parikh and E. Celelski India

The idea of women and work conjures up the images of income generation, better self image that comes from self fulfilment, capacity building and empowerment. However, for women in the rural areas of developing countries it consists of primarily the housework, often amounting to chores or back-breaking drudgery with hardly any reward or empowerment. The simple tasks such as getting water or fuel involves activities such as collection, transportation and in case of fuels processing of biofuels. Even after this ordeal, health risks follow from polluted water and indoor pollution from smoke from cooking fires. The air and water pollution involve diseases ranging from bronchitis, accurate respiratory infections, diarrhea, hepatitis and so on. This situation persists for time immemorial and now extends into the 3rd millennium. The problems do not concern just a select group of people but touches more than a billion women.

The papers in this session cover three continents Asia, Africa, Sri Lanka and Vietnam case study show the risks range from snake bites, cuts, bruises and body injuries from wood cutting, stressed backs and necks from carrying heavy head loads of fuel and water over long distances. It is recognised that there can be no single solution to these formidable problems. The case study for India shows the needs for clean fuels for cooking at least improved stoves for the dirty fuels. The case study of Kenya shows the need for promotion through people's participation. ¹

SUS09: 2 Women in Nepal: An Energy and Health Prospective

Tamrakar Nigma IUCN Nepal / The World Conservation Union, Nepal

The situation of women in Nepal is not very different from other developing countries in South Asia. Women, who account for over 50 percent (11.62 million) of the total population, are mostly confined to household chores. While average literacy rate is 40.4 percent (female being 22.8 percent), life expectancy of women is half year less than men. Of 85.8 percent of total population, 86.3 percent of total women live in rural areas where developmental infrastructures are very scarce. Besides possessing domestic bindings, women are also responsible for on and off-farming activities and community works. In the absence of decision-making powers, women's contribution is apparently unheard of in the social spectrum.

Under the Nepalese law, women need the recommendation of a male - either father or husband - to acquire citizenship, whereas a male child is entitled to it at birth. They have a little or no rights

¹ The second para will change depending on countries represented

over their bodies, decisions, and their voices are seldom heard. Their choices are limited to marriage, also often determined by the male head.

IUCN Nepal has been supporting communities (including women) for the conservation of rhododendrons in the Tinjure Milke Jaljale (TMJ) area in Eastern Nepal. Need assessment on rural energy has indicated that the job of collecting fuel wood exclusively rests with women. Fuel wood availability and its use patterns directly affect livelihood of women in rural areas and greater time consumed in collection of fuel wood points to scarce resource availability due to its overuse i.e., an average fuel wood collection time per week is about 22.34 hours. It implies that women in each household spend roughly 134 days a year in fuel wood collection. If this time is used for income generation activities, it can generate NRs.58.31 million (US \$ 767,290.00) in TMJ area alone. The national census survey of 2001 has a plan to assess women contribution in overall national economy.

Due to cumbersome job, majority of them suffer from uterine prolapse, high pregnancy related problems and mental disorders. In order to be relieved from childcare and drudgery, mothers give beer to children to sedate which adversely affects their mental growth. Indoor air pollution affects their health on psychological disorder, lung and eye related diseases.

Skill enhancement on construction of improved cooking stoves (ICS) is one of IUCN's major interventions to reduce women's misery, avoid indoor air pollution and improve health. Subsequent to reduction of 40 percent fuel wood consumption after ICS installation, women in TMJ have gradually ensured a sustainable use of natural resources, pro-health and hygiene living.

Such intervention in energy sector has exemplified how women can help in conserving rhododendron forests and preventing harmful exposure against smoke. With the saving of time from energy management, women now have a new opportunity to improve health and hygiene, to ensure sustained living through increased income generating activities in TMJ. Any intervention in the rural energy sector like in TMJ has progressive impacts on the livelihood of communities, including women and children.

SUS09: 3 Rural Vietnamese women's Health related to Cooking stove

Pham Thi Thuy

Center for Reproductive and Family Health, Vietnam

Until now, in the early years of the 21st century, Vietnam is still a poor agriculture-based country. In rural, remote and isolated areas, people's lives are faced with many difficulties. Cooking stove and cooking technique are still backward. While people of industrialized countries have used gas cookers, electric cookers, people in Vietnam rural and mountainous areas still use traditional cooking-stoves or chock three bricks. Main fuels are straw, woods, rubbish, coal...In the family, the responsibility of searching for fuels and cooking are women, old people or girl children.

Decade-long traditional cooking techniques of rural Vietnamese tremendously affect women in a direct and indirect way. Direct affect is health degradation due to be unhygienic and lacking of facility. Kitchens in rural Vietnam areas have small areas, short of light, full of smoke and dust... which causes eyes diseases, respiratory diseases, lung diseases, headache, asthenia. In addition, traditional cooking technique wastes a lot of fuels. Rural Vietnamese women have to seek for woods from forests and the waste of agriculture products because they can not afford fuels in the market, which causes women's health to them such as disasters or dangers they may face when climbing the mountains or walk through the streams.... Lacking of fuels for cooking is one of the

reasons of deforestation that affect ecological environment, leading to flood, and drought every year in Vietnam. This is a vicious circle of poverty.

The indirect affect of traditional cooking technique on rural Vietnamese women is that cooking consume women a lot of time and energy. They have little time for relaxation, taking care of themselves, studying, watching television, reading newspapers. They have little time to participate in social activities, entertainment activities and get access to social information. Time and energy women spend on housework are often lowly valued by family members, this work is unpaid and not considered to make contribution to the economic development of the family. Kitchen environment-the main working place for women is often ignored, which adversely affects health conditions, environment and life quality of the whole family, especially women and children. Men and even women are not aware of the roles women play in creating happiness for the family.

Backward, unhygienic, unscientific cooking techniques have caused many affects on women's health and family happiness. They lose their power and the chances of participating in social activities and studying. The opportunity to be equal to men increasingly becomes out of reach for rural V

ietnamese women.

How to reduce the above difficulties for women? How to encourage women to take part in community activities? How to help them to be equal to men?

It is urgent to improve cooking stoves and cooking techniques in order to protect health and right to equality for women, create opportunity for women and men to be equal in working and enjoying.

SUS09: 4 A Breath of Fresh Air: the Role of Women in Reducing Indoor Air Pollution in Kenya – The Case of Maasai and West Kenya Communities

Martha Mathenge , Alison Doig, Liz Bates, Nigel Bruce, Stephen Gitonga, Justin Nyaga , Hellen Owala

Intermediate Technology Development Group (ITDG), Kenya

A breath of fresh air is a result of the active participation of women in an energy project in Kenya to improve the health environment in their households. The paper highlights the key role of women in an indoor air pollution project implemented by Intermediate Technology Development Group (ITDG) between 1998 to 2001.

The project aimed at contributing to the reduction of exposure to indoor air pollution in the light of negative health impacts such as acute respiratory infections, low birth weight, eye and ear problems among other smoke related diseases particularly of women and children in poor households by demonstrating the effectiveness of selected interventions.

A baseline assessment prior to the project intervention indicated mean 24-hour values for respirable particulates of 5526 micrograms per cubic metre in Kajiado and 1713 micrograms per cubic metre in West Kenya. These figures are far beyond the recommended US Environmental Protection Agency standards for annual acceptable levels of respirable particulates of 50 micrograms per cubic metre. Around 80% of people in rural sub-Saharan Africa depend on biomass (wood, dung, crop residues) for domestic energy. There is mounting evidence that the resulting indoor air pollution (IAP) increases common, serious health problems, including childhood pneumonia and chronic lung disease. Previous attempts to reduce this have often failed due to lack of community involvement in developing appropriate, financially, environmental and sustainable solutions. The project involving fifty households in two rural communities in Kajiado district and

West Kenya adopted a participatory technology development (PTD) process to devise interventions that alleviate indoor air pollution levels.

The paper looks at the problem environment of the two communities where the project has intervened. A key success to the project is attributed to the role of women as seen in community mobilisation, selection of project households, intervention design and modification, co-ordination and participation in project activities. They had an active role in airing their views on existing problems and possible solutions, focus group discussions, scientific monitoring and their overall innovation in implementing the project work.

Project interventions coupled with the women's self drive, has had remarkable impacts on poverty, empowerment, gender, marginalised groups, the environment, health status of the beneficiaries, and has enhanced sustainability of the project work.

After successful monitoring of the respirable particulates and carbon monoxide levels in the cooking area of the sample households on two occasions before and after intervention, there is tremendous reduction in the smoke levels. Statistical analysis of the results shows that the introduction of hoods produced an average reduction in respirable particulates in the house by 75% and carbon monoxide by 77%. The results from the cooks personal monitors gave an improvement in carbon monoxide exposure by 35%.

It is evident from the project initiatives that as the saying goes, "When you educate a women, you have educated a whole community". If women are given a chance, they can spearhead development work to a whole community and the society at large. Women are readily available when called upon to go an extra mile in implementing development issues for they know it is in their destiny.

Further research is still needed to pursue the indoor air pollution status in the households where biomass fuels are a primary source of energy particularly in the developing countries.

SUS09: 5 Women's Work on Energy and their Health Impact

Jyoti Parikh Indira Gandhi Institute of Development Research, India

In rural India, whether it is household chores, obtaining fuel and water or agriculture, women play very active role. Our study in the largest state of North India viz. in Uttar Pradesh reveals the amount of work involved in fuel and health impact from smoke from cooking fuels. Indoor pollution exposure due to cooking in poor ventilated kitchen threatens their health.

The study covers 10264 females in 7564 households in 51 villages of 6 districts of Uttar Pradesh. Our study shows that women walked carrying the head loads of fuel involving 23 hours. They make 8 trips per month. Pollutants such as Carbon dioxide, Nitrogen dioxide, Sulfur dioxide and volatile organics such as formaldehyde, Benzene, Toulene, and Xylene are seen as the main culprits released during fuel burning which affect health ailments. The linkages with respiratory diseases and eye irritation were analysed through direct interview and medical check ups. Our analysis reveals prevailing respiratory diseases where 4.2% females suffer from bronchitis, 1.9% from asthma, 2.4% from chest infection, 2.5% from tuberculosis and 4.2% from eye irritation. This also poses a burden of health costs and wage loss in addition to the lost opportunity of time to put it in a productive activity. When women lose their working days, there is economic loss.

These issues need strategic thinking in order to achieve *'sustainable'* solutions. Integrated approach with due consideration to women's work, poverty and health is the answer to many issues. Supply of clean energy source is needed which are currently unavailable or unaffordable.

This paper tries to analyse various issues of socio, economic and environmental concern of energy use, with women and health of the family at a center stage.

SuP02: Psychosocial Exposures and Health Effects

SUP02: 1 Sexual Harassment at School – a Possible Contributor to the higher Degree of Girls reporting Psychological Symptoms compared with Boys in Grade Nine

Katja Gillander Gådin and Anne Hammarström Umeå University, Sweden

Purpose: The aim of this study was to analyse whether psychosocial factors at school were associated with a high degree of psychological symptoms among boys and girls in grade nine, with a special focus on sexual harassment.

Methods: The study was based on the final follow-up of a 3-year prospective study, including 336 pupils (175 girls, 161 boys) who were investigated with an extensive questionnaire. The non-response rate was negligible (one pupil refused to participate). Logistic regression analysis was used to analyse whether school-related factors (teacher support, classmate support, sexual harassment), body image, and parental support were associated with a high degree of psychological symptoms.

Results: A multivariate logistic analysis showed that sexual harassment at school was associated with a significantly increased risk of a high degree of psychological symptoms among girls. Lack of classmate support increased the risk of both boys and girls reporting a high degree of psychological symptoms.

Conclusions: Sexual harassment must be acknowledged as a negative psychosocial school environmental factor of importance for the high degree of psychological ill-health symptoms among girls compared with boys. School health promotion needs to take relations between pupils into account in the work for increased psychological health among adolescents

SUP02: 2 Work related Psychological Distress: Survey of the Health-Care Staff at a University Hospital

Serge Fanello B Ripault, V Delbos, S Verrier, N Jousset, Y Roquelaure, D Penneau-Fontbonne France

The department of preventive medicine conducted a mental health survey of the staff of a University hospital center that employs 2392 persons: the objective was to assess the association between psychological distress, the organisation of work, staff relationships, and some non-work factors.

Population and Methods: The survey was conducted among 604 members of the health-care staff, a proportional sample (25%) randomly selected and stratified for three personnel categories (239 nurses, 251 nursing assistants and 59 cleaning staff). The questionnaires, submitted anonymously, included 46 questions on social and occupational characteristics and workplace experience as well as a standardized mental health questionnaire (GHQ 12). EPI-INFO 6 software was used for the univariate analysis and SPSS version 10 for the multivariate analysis.

Results: In all, we were able to analyze 456 questionnaires (75% response rates). Woman accounted for 91 % of the sample; their mean age was 38 years. Overall, 30.2% of the responses revealed psychological distress (GHQ score >1 2). The staff in this group were older; they mentioned above all a lack of recognition at work, by their colleagues (p<0.003) and their superiors

(p<0.005). They also mentioned deterioration of their knowledge and skills and the impossibility of making suggestions about the organisation of work. Self-fulfilment outside of work seemed to constitute a protective factor. On the other hand, psychological distress was not associated with schedule, department, or work grade.

Conclusion: The occupational physician, a privileged observer of the relation between work and health, must be able to detect psychological distress among health-care personnel in order to act to improve their work experience; their input into decision making must be reinforced, as must the provision of recognition in the workplace.

SUP02: 3 Girls' Experience of Verbal Violence in School

Miriam Eliasson and Ewa Menckel National Institute for Working Life, Stockholm, Sweden

In Sweden, the Work Environment Act encompasses not only adult workers, but also school children. School is the daily work environment of several hundred thousand students. All students have the right to a safe school environment, where they are not harassed or exposed to violence. During recent years, the media has given an increasing amount of attention to the problem of verbal violence between students in school, especially of sexist language directed toward girls. Exposure to verbal violence in school can be expected to have detrimental effects on girls' health and well-being. However, few studies have so far been conducted. The present study is the first step of a more comprehensive investigation of verbal violence in school, with the aim of delineating its extent and meanings for students and teachers. This presentation describes the extent of a particular form of verbal violence: the use of the word "whore" (Swedish "hora") directed toward female students. A questionnaire was distributed to all 6th and 8th grade girls in a medium-sized Swedish city. In total, 500 girls were surveyed. The questionnaire was distributed and filled out during class, with a response rate of 84 percent. Preliminary results indicate that one third of the girls had been called "whore" by another student during the school year of 2000-2001. The use of "whore" as an epithet directed toward female students thus seems to be extensive. The consequences for the girls are not simple and straightforward, but depend on context.

SUP02: 4 Physiological markers of work-related stress in women

Birgitta Hellström and Ulf Lundberg Department of Psychology, Stockholm University

The aim of this study was to investigate the association between work-related stress and physiological stress markers in women. It was based on the most recent wave of data collection from the IDA-project (Individual Development and Adjustment), comprising 227 women born in 1955 in the same area in Sweden and representing a wide range of different occupations. Salivary cortisol was measured four times during the first hour after awakening (0, 15, 30, and 45 min) in the morning, and urinary adrenaline and noradrenaline were measured at work and during non-work conditions at home. Adrenaline levels increased significantly at work, whereas noradrenaline levels were significantly elevated after work, compared with non-work days at home. Significant positive correlations were found between the amount of overtime at work and each of the four measurements of morning cortisol (r=0.29-0.38, p<. 01). The results are consistent with earlier findings of morning cortisol as an indicator of work overload in women, and that women tend to have elevated

noradrenaline levels after work. It was concluded that salivary cortisol and urinary catecholamines could be used as sensitive physiological markers of work-related stress in women.

SUP02: 5 Domestic service: physical and psychological risk factors (Latin America situation)

Hugo Piedrahita Luleå University Of Technology

The International Labor Organization (ILO) estimates the number of working children aged between 5 and 14 years to be about 250 million in the developing countries, of whom at least 120 million are working full time. Of these, 61 percent are in Asia, 32 percent in Africa, and 7 percent in Latin America. Relatively few children work in developed countries. The economic activity participation rate of children it is one in six (or 17%) in Latin America. Domestic service, child domestic or domestic workers are defined as children under the age of 18 who work in other people's household, doing domestic chores, caring for children and running errands, among others tasks. The problem focuses mainly on the situation of live-in child domestic, that is children who work full time in exchange for room, board, care, and some remuneration. 5.9% of households in Latin America have one or more live-in domestic workers, and 9.0% have one or more day domestic workers. Besides, virtually all child domestic workers in Latin America tend to be girls. For example in Colombia, 20% of girls between the ages of 10 and 14 work as domestics and the percentage rises to 32% in rural areas. In Brazil 22 percent of working children are employed in services of which domestic service is the main occupation. In Colombia 60% of all children labor are girls in domestic services. In Haiti, the use of children as servants is known as "restavek" in Creole, derived from the French "rester avec" ("to stay with"). The practice of restavek has been openly denounced as slavery in Haiti. The children labor as domestic service are exposed to several critical physical (cooking, boiling water, chopping vegetable, using chemical cleaning fluids and carrying heavy items) and psychological conditions (discrimination and the isolation, long hours for work (15 to 18 per day). This poster presents the situation of domestic service in Latin America especially in some countries in where this situation is more critical.

SUP02: 6 Stressful Working Conditions And Some Health Effects Among Female Researchers in Egypt

Sanaa Rizk

National Research Center 33 Carnich st Nile Maadi Cairo, Egypt

Objectives: In developing countries like Egypt, there are many social, economic and environmental problems that made most families seek better living conditions especially by higher education of girls. As a result, over the last 20 years the number of successful career women has increased. One of the most appealing jobs in this respect is research. However, lack of modern equipment, as well as low governmental financial support for research made these jobs rather frustrating. This has initiated this study.

Methods and Results: the study included examination of sum 420 female aged 30 to 45 years of the same socio-economic status. Of these, 200 are exposed to stress at work and the rest are not as control. All were filling a modified "Middlesex Questionnaire", full personal and occupational

histories and a full medical examination with special reference to cardiovascular manifestations and Arabic translated anxiety scale sheet.

Conclusion: With stress at work one tends to smoke more, complain of cardiovascular symptoms, has higher blood pressure and becomes more vulnerable to depressive symptoms.

Data were analysed using SPSS program for windows. Many descriptive and analytic statistical procedures were used.

It is recommended to provide better work conditions, higher research funds, promote awareness of smoking hazards and the value of periodic medical examination for such an important sector of the Egyptian community.

SuP03: Gender and Socioeconomic Aspects of Inequality in Working Conditions

SuP03:1 Personnel reductions and reorganisations in health care -consequences for medical secretaries

Anna Hertting, Ullabeth Sätterlund Larsson, Kerstin Nilsson and Tores Theorell National Institute for Psychosocial Factors and Health, Stockholm

Objective

To explore the experiential aspects of psychosocial stressors and motivators for medical secretaries adjusting to 'downsizing' and continuing work reorganization processes.

Method

Longitudinal interview study of six medical secretaries experienced structural changes in a large hospital in Sweden. The first interview took place in the autumns of 1997 (in connection with the last round of the 20 percent personnel redundancies), 1998 and 2000. A Content analysis from audiotaped and transcribed interviews was used to obtain understanding.

Results

The study provided nine themes from perceived psychosocial stressors, as well as motivators. Each theme was composed of several sub-themes with negative (-) or positive (+) meaning, and grouped into four topics; Psychosocial work conditions (consisted of two themes, 'Too much work', versus 'The comprehensive whole'); Occupational functions ('Lack of recognition', versus 'Professional pride'); Private life ('Worries', versus 'Being resourceful'); Communication and Coping behavior ('Passivity & Resignation', versus 'Ambivalence', or 'Activity & Solution Orientation'). The main expressions concerned negative aspects in terms of stressors and fatigue, although the picture became somewhat more varied and balanced with motivators in the interviews of 2000

Conclusions

There is an evident contrast between a demanding reality of work, described by medical secretaries, and their expressed desire to have a more reasonable work rhythm and to be able to complete work. They also wanted to be listened to regarding their requests about work options and decent salaries. The importance of making feelings of inferiority and injustice visible as well as to support professional pride and more assertive coping behavior is emphasized in this study. This is also valid for the need to enhance communication between interdependent workers. The identified metaphor 'energy thieves' could be used in stress prevention, and 'energy givers' in health promotion work.

SuP04: Occupational Exposure-Vibrations

SuP04:1Occupational hazards, complex pathology in a small Romanian butchery

G. Suciu, -Dermatological, C. Handra D.Fotache, Colentina Hospital, Bucur, Institute of Public Health, all Bucharest, Romania

Objective:

Occupational morbidity analysis in a small butchery in Alexandria. In this case, the peculiarity of our casuistry consists in the existence of multifunctional work posts: the same employee lifts, transports, carves and prepares the beef and pork meat, so being exposed to several types of occupational hazards.

Methodology

- -Work post analysis through the NYOH "job description" questionnaire
- -Lab findings analyze from the Occupational Medicine Laboratory of Teleorman district

Results:

A. Occupational hazards:

- -Exposure to low temperature: average temperature=5-8 oC, with long exposures to 2-4 oC
- -Prolonged standing up, repetitive moves, digitopalmar pressure when carving meat
- -Lifting loads of more than 50 kg by women
- -Use of chemical meat preserves- irritants and sensitizers
- -High risk of work accidents caused by sharp instruments used at low temperatures (cold reduces sensitivity and mobility- thus digital control).
- B. Occupational diseases diagnosed in our 3 female patients aged 46, 48 and 52 (length of service: 22, 24 and 33 years):
- -One case of chronic allergic contact interdigital and palmar eczema in an atopic patient exposed for 3 years to chemical meat preservers
- -Two cases of Raynaud's syndrome (Pyykko scores of 8 and 9) caused by prolonged exposure to cold and repetitive micro traumatisms
 - -Three cases of hyperalgic spondylosis
- -Multiple scars on the upper limbs (in all three patients) and on the abdomen (in one patient) from wounds made while carving meat
 - -One case in observation for the carpian tunnel syndrome at the right hand.

Conclusions:

- -In some small enterprises with only few employees, multifunctional work posts imply multiple occupational hazards.
- -Nowadays we see more often women taking men's tasks that require strength and physical effort (meat lifting and carving).
- -Fear of unemployment leads to neglecting occupational health and work safety. Side effects are: complex occupational pathology, usually chronic, followed by intense and premature physical damage, diminished work capacity and low life quality at still young and normally active age.

SuP04:2 Occupational Hearing loss among telephone operators in the communication industry

Michael Sumbwanyambe

Occupational Health & Safety Consulting, Kitwe, Zambia.

Preamble: Telephone operating is a job largely dominated by women. Often these women complain of earaches. A study was prompted up to look into these complaints. This study was conducted among telephone operators at a local telecommunications company.

Aim:

• To establish whether prolonged usage of telephone can cause a shift in the hearing threshold of a telephone operator.

Method:

Telephone operators (men & women) were followed up for a period of 4 years. The following activities were performed:

- Pure tone Audiometry conducted annually.
- Working environment inspections conducted in the work place.
- Health and safety education in safe use of hand set.
- Test ground, well calibrated pure tone audiometer, use of acoustic testing booth.
- Subjects rested from noise exposure 24 hrs. prior the examination.

Results:

- 1. In 1995, 46 out of 65 employees tested had some hearing loss.
- 2. In 1996, 14 out of 26 employees tested had some hearing loss.
- 3. In 1997, 24 out of 52 employees tested had some hearing loss.
- 4. In 1998, 11 out of 13 employees tested had some hearing loss.

Contributing factors:

- Headset usage, always on high.
- 8 hours duration of exposure to telephone operating.
- Rest pauses in adequate.
- Condition of headsets.
- A lot of noise in the circuits.

Conclusion:

- Some hearing loss does exist in using a telephone for a long time.
- Defective headsets can cause pain in the ear.
- Rest pauses are essential in this business.
- The rest room must be conducive to relaxation.

Recommendations:

• Telephone operator must be a multiskilled person. It should be performed once in a while. That way, the hearing can be preserved.

• It is important to ensure that the working environment is inspected regularly in order to maintain standards.

SuP04:3 Cytogenetic monitoring of hospital workers occupationally exposed to low levels of ionizing radiation

G. Slapsyte, Vilnius University,

V. Samerdokiene Lithuanian Oncology Center, Vilnius, Lithuania

Medical workers constitute the group most consistently exposed to low doses of ionizing radiation. However, exposures to even low levels of ionizing radiation have been reported to produce chromosome damage in lymphocytes of exposed persons. Moreover, the carcinogenic potential of ionizing radiation is widely recognised. Chromosomal mutations are considered to be causal events in the development of neoplasia, they play important role in the activation of protooncogenes and inactivation of tumor suppressor genes. An increased level of chromosome breakage has thus been considered to be a relevant biomarker of future cancer risk.

In the present study two cytogenetic endpoints (chromosome aberrations, CA, and sister chromatid exchanges, SCEs) were used as indicators of chromosome damage in peripheral lymphocytes of 27 female nurses exposed to low levels of ionizing radiation (18 occupied in X-ray diagnostics and 9 in radionuclide diagnostics). Twenty six non-exposed females approximately matched by age were used as controls. Routine whole blood cultures were made in RPMI 1640 medium supplemented with 12% newborn calf serum, phytohemagglutinin, bromodeoxyuridine and antibiotics. Cells were cultured for 72h. Culture harvest, fixation, preparation of flame-dried slides and differential staining of sister chromatids were carried out accordingly conventional techniques. 200 first-division cells per individual were analysed for chromosome aberrations. SCEs were scored in 30-50 second-division cells per individual.

Chromosome aberration frequencies determined in the lymphocytes of nurses occupied in X-ray diagnostics did not differ from control level (1.92 vs. 1.74 CA/100 cells, P=0.6678). However, the frequencies of aberrations in the radionuclide diagnostics group were higher than in controls as well as in the X-ray diagnostics group, with significant differences for dicentrics (0.83 vs. 0.11 dic/100 cells, P=0.004), total chromosome-type aberrations (1.94 vs. 0.99, P= 0.0189) and total chromosome aberrations (3.44 vs 1.92 CA/100 cells, P=0.013). The differences were not significant for acentric fragments and chromatid breaks. There was no obvious trend of increased aberrations as function of employment and age of the individuals. SCE analysis revealed no differences between the exposed and control individuals. Although the dose absorbed in exposed subjects did not exceed the limits established by law, the high chromosome aberration rates found in one group of nurses deserve additional studies aimed at evaluating the real exposure of these workers and the need of improving surveillance.

SUP04:4 Effects on Health and Perception from whole-Body Vibration Exposure

Masashi Uchikune College of Science & Technology Dept of Precision Machinery Engineering Nihon University Chiba, Japan

Aim: The vibration dose values at which various degrees of adverse comment may be expected in buildings (based on International Standard 2631).

The effects of vibration in buildings for workers of working are based on the psychological evaluation and the workers must receive the risk of exposure to whole-body vibration, and women are measured the physiological effects for that purpose. In the place, there are several possible adverse comments, so the values of the acceleration are shown with on the Critical working areas (0.2 m/s^2) , Residential $(0.4-0.8 \text{ m/s}^2)$, Office (0.8 m/s^2) and Workshops (1.6 m/s^2) .

This dose value in the above acceleration is applicable irrespective of age, male, and female the whole-body vibration occurs as a continuous vibration.

It was necessary that Standard setting for whole-body vibration, and health effects of vibration on the autonomic nervous system studied this paper.

The experiment aims to evaluate for women under such working conditions, especially whole-body vibration exposure. It must prevent the outbreak of a decline in the working and the working environment.

Method: As for working condition, effects of vibration with living-body used as follows. The study was performed using multi-input vibration testing equipment in the large structure testing building at this faculty. This vibrator of the whole-body vibration was a piece of experimental equipment able to vibrate at exact frequencies ranging from 0.01 to 50 Hz with maximum amplitude of 200 mm, by computer control. A legs-less-chair was mounted on the vibration table, and a subject (female) was exposed to the vibrations, sitting on the chair with her legs down. The amplitudes of vibration table were 25, 35, 50, 100, 125, 150, and 175 mm frequencies ranged from 0.01Hz or more; Rms values of vibratory acceleration ranged from approximately 0.000042m/ s² or more. Exposure time was 21-minute, and the frequency amplitude of vibration was changed randomly. Physiological effects were examined by investigating the effects on the cardiovascular system, respiratory system (sympathetic and parasympathetic nervous systems) Measurement was performed for 30-second at 3-minute intervals after starting vibration in the cases of heart rate and respiratory rate. In the case of saliva secretion, the dental cotton roll was replaced at 3-minute intervals to measure the secreted quantity over 3-minute. The health effects are calculated by baseline and each measurement.

Results and Conclusions: Physiological effects on the autonomic nervous system appeared as changes in heart ratio, respiratory rate and quantity of saliva secretion. The heart-rate ratios and respiratory ratios tended to decrease in the case of vibration with frequencies of less than 0.06 Hz, but increase in the case of frequencies of more 0.4Hz. The ratio of saliva secretion tended to increase in the case of vibration with a frequency of 0.015, 0.04, 0.06 and 0.1Hz. The autonomic nervous system tended the state of predominance of the parasympathetic nervous system. Psychological evaluation by the introspective method of numerical values showed that six and seven grades were converted to scale numbered (1-6, 7) in which "4" represented "normal". It was believed that when the acceleration was "unpleasant" to exceed 0.20 m/s² and that low frequency area which gave "normal for pleasant" in the range 0.00094-0.028 m/s². Those data were shown at frequency range from 0.015 to 0.1Hz. The state of predominance of the sympathetic nervous system was shown 0.11, 0.14, 0.22 m/s² or more at 15-min, 21-min (x: for-and-aft, .y: lateral-axes).

Furthermore, it was low acceleration for Standard and showed the range of a health effects in x, y-axes direction for women under the environment of this vibration area.

MoW01: Gender Mainstreaming and Equal Pay

MoW01:1 Social Partnership and Gender Pay Equality: Local Government in the UK

Dr. Carole Thornley

Centre for Industrial Relations Keele University, Staffordshire

The public sector in the UK is a major employer of women: nearly 4 million women, over a third of all female employees in the economy, are directly employed in it. Within the public sector, local government accounts for the largest single employment area. Over seven in ten local government workers are female, almost 60% of whom work part-time. Local government therefore has particular relevance for potential advances in equal pay.

In 1997 a ground-breaking new agreement was negotiated in local government, impacting on 1.5 million workers. The agreement, which became known as "single status", was negotiated broadly in a spirit of "social partnership", and offered potentially radical changes to pay and conditions of employment, with a particular emphasis on harmonised arrangements for "manual" and "white collar" workers, and a new national job evaluation scheme which also sought to address equal pay criteria. The National Joint Council for Local Authority Services is now the largest bargaining unit in the UK and the agreement may well provide a "model" for changes elsewhere in the public sector. The agreement also coincides with a certain renewed interest in addressing low/ unequal pay issues, and has particular relevance where government (viewed as national or local state) is "employer".

This paper reports on the gender equality aspects of the initial findings of a three-year, fieldwork-based, research project into the implementation of the agreement, commissioned by UNISON (the largest trade union in the UK). The paper firstly reviews the primary evidence on pay inequalities in local government, and evaluates the extent to which the agreement has impacted on them. The analysis then draws on primary documentary sources and fieldwork interviews conducted at national and regional levels with the key social partners to evaluate perspectives on the gender equality aspects of the agreement and key impediments to progress.

MoW01:2 Feminist Economists and Feminist Economy

Anita Nyberg

National Institute for Working Life Stockholm Sweden

Economics is one of the most influential and powerful academic disciplines, but it is also one of the most women and gender resistant disciplines of all.

Economists critical of mainstream economic theory and method have, however, started to apply a gender perspective to economic models. One important feminist critic has been that economic data, theory and policy do not take into consideration unpaid care work (including domestic work) and paid work in the informal sector. Feminist economists have therefore started to present alternative pictures of economic reality, which includes such work. Making unpaid care work and paid

informal work visible gives a more comprehensive picture of the economy and women's place in the economy. It also makes it possible to analyse different sectors of the economy and the connections in between and formulate economic policies.

When consideration is taken only to the monetary economy men are seen as more economically active than women, resources are redistributed from men to women through social security systems and women are subsidised more than men by public services such as child and elderly care. If also unpaid care work is included, however, women are as economically active as men and have as long or longer working days, resources might rather be seen as redistributed from women to men and women's unpaid care work subsidising men's paid work. Changes which are seen as productivity gains and savings might only mean that costs have been transferred from the public sector, which is monetary and therefore visible, to the household sector, which is not monetary and therefore invisible.

Economic data, economic theories and models, which integrate paid work, whether performed on the formal or the informal market, and unpaid work in the households, are needed in order to make women's economic contributions visible, to be able to evaluate and forecast the effects of economic development and economic policy from a gender perspective and to draw up effective economic policies on the regional, national and global level. This is the kind of questions which engage feminist economics and that would change economic data, theory and reality.

MOW01:3 To Create Fair Salaries through Individual Negotiations

Kerstin Rosenberg Jämställdhetscentrum Karlstads Universitet, Karlstad

A study devoted to develop more knowledge about a how the value of work is determined when you are using individual negotiation about your salary and how that will effect the organisation, due to the (different) skills of men and women.

The purposes of the study are to identify and analyse the processes behind the determination of salaries in banking in Sweden. Three banks are examined and evaluated especially from a gender perspective. Important research questions are:

What constitutes a job evaluation process in a banking environment? Which is the major steps in such a process?

Which are the pros and cons with job evaluation especially from a gender perspective, but also from an economical and organisational perspective?

How does the results of job evaluation affect the salary policy in banking?

The study started in March 2000 and will be finalised in the spring of 2002.

The collection of data will mainly emanate from experiences gained through participant research and observations in the tree middle-sized banks in Sweden. Interviews and enquiries with management and staff will support the observations.

Step one, job evaluation, was taken place during the spring 2001. Step two is to create a method for determine qualification skill. Then are the individual negotiations to be in the spring of 2002.

My wish is to present and discuss the results from and the analysis of the study at a seminar during the conference.

MoW01:4 Gender Mainstreaming Into Health Service And Care)

Tran Mai Huong

National Committee For The Advancement Of Women In Vietnam

The presentation introduces a framework for gender mainstreaming in health service and care, focusing on the macro policy-making level. This framework is based on a practical approach applicable to developing country with reference to experiences of the Southeast Asian countries. The national machineries for advancement of women can cooperate with Government agencies on health to apply the framework in order to ensure the women's rights in terms of health care. The presentation also introduces some experiences and achievements in Health care and service of Vietnam and its successive plan of action in this sector

MOW01:5 Work analysis to fight against wages inequalities: a law, a tool and results

Edmée Ollagnier and Viviane Gonik Geneva University and Lausanne University, Switzerland

From 1996, Switzerland has a law (LeG: Loi sur l'Egalité) promoting equality between women and men on the workplace through different aspects. Even with the Swiss Constitution naming the equality principle between men and women from 1981, the 1996 law has been adopted considering that different types of inequality were still updated, including the wages with an average of 20% less for women than for men for the same job.

One article of the 1996 law says: "a same salary for a SIMILAR job". To consider this principle means to be able to understand and to prove the similarity and equivalence, or the differences between different working situations. To promote this principle, the Federal Office for Equality did order a method to Swiss researchers, experts in work evaluation. This method called ABAKABA has been published (KATZ C., BAITSCH C., 1996) and advertised widely in the country. This evaluation tool has been set considering some parameters taking care of non-discrimination, which has been forgotten in different traditional tools used to measure the value of a specific job. ABAKABA helps to be able to measure the value of a job and so, to compare this value with other jobs' value, and to answer to the question of similarity to establish wages. Four fields, with subquestions are proposed: intellectual, psycho-social, physical and responsibility. The construction and the principles of this tool will be presented.

This method has been adopted by several Swiss States and cities wishing to base their local policies on the principle of non-discrimination between women and men in the public sector. The law also convinced social partners to debate about equality on the workplace and to give to the workers unions the possibility to complain legaly against discrimination. It is in this case that we conducted our research, through an expertise asked by the judge who had to take a decision for the Court in Geneva State after a request coming from a union against an employer in the private sector.

Our main purpose will be to describe the work analysis we have made in this private company, having an activity in mashrooms's culture in two different sites in Geneva area. The work analysis has been done in evaluating the activity done by the women and the men in the two sites (the authors are both ergonomists and recognized as experts by the authorities). This analysis has been used to measure the different working individual situations with ABAKABA to make comparisons. As results, we found that the women had a high score. Comparing the scores with the salaries, we attested in a report for the court that there was a real objective discrimination in this company. After several months, the judge condemned the employer and forced him to pay the legitimate wages.

Reference:

KATZ C., BAITSCH C (1996): *L'égalité des salaires en pratique: deux outils d'évaluation du travail non-discriminatoire à l'égard des sexes*, ABAKABA et VIWIV, Genève, Georg Ed.

MoW02: Gender Inequality at Work and at Home

MOW02:1 Choosing between Family and Work? The Dual Labour Supply of Danish Women

Mette Deding The Danish National Institute of Social Research

During the last decades the hours norm for a standard fulltime job has decreased from 42 hours a week (in the 1970s) to 37 hours a week (late 1990s). However, Danish women have increased their average weekly working hours during the same period, contributing to the Danish conception of the Dual Breadwinner Model. The main explanation for this is the lower share of Danish women in part-time employment, falling from about a third in the 70s to about a fourth now. Partly this is a generation effect – younger female cohorts entering the labour market more often have fulltime employment than the older cohorts of women.

When the women are working more hours in the labour market, fewer hours are naturally available for housework and leisure. But little is known about the effects on life and work within the families. In this paper we thus ask the question: Do the women choose between work and family or do they want both. We analyse this by investigating the women's dual labour supply, i.e. their working hours both outside and inside the household. One hypothesis is that there are two types of working women. The first type – the career-oriented woman – works many hours in the labour market and fewer hours at home. Whenever it is possible, she buys domestic service. She has none or only few children, and if she has any the father is involved a lot. The second type could be called the family-oriented woman. She works in the labour market, but often less than fulltime. Housework is important to her, especially when involving the children. Her husband does also some housework, but she is the main responsible.

The aim of this paper is to investigate whether the above description fits the Danish women, and in addition to this, identify the important factors behind the observed behaviour. The data are from the Danish Time-Use Survey from 2001, which includes both a diary of time use during the day and also a background questionnaire. The focus is on females in couples, both with and without children. The econometric framework will propose a dual labour supply model. Hours worked in the market and at home are clearly interdependent and the analysis will take this into account by applying a simultaneous model of working hours in the labour market and in the household. In addition, information about the male partner is taken into account. Furthermore, a research aim is to compare the time-use of Danish women in this survey to the latest Danish time-use survey from 1987.

MOW02:2 The weigth of ligth work. Gender division of work in nocturnal activities

Lúcia Rotenberg W.B.Marcondes1; L.Rotenberg1; L.F.Portela1; C.R.C.Moreno2 Oswaldo Cruz Foudation Rio de Janeiro 2University of São Paulo, São Paulo

The present study is the result of a survey carried out in 1998, among male and female night-shift workers at a plastic package plant in Rio de Janeiro, Brazil. In productive sectors where there is nocturnal activity, work hours range from 10 p.m. to 6 a.m., from Monday to Friday.

The study was based on (a) the qualitative analysis of the workers' accounts on the inversion of the sleep-wake cycle, quotidian life and gender attributions, inside as well as outside the plant; and (b) the ergonomic descriptions of positions held by female and male workers in the factory. Considering accounts of both male and female workers, we focused, particularly, on aspects of male-female relations inside and outside the plant and tried to bring upon issues such as the division of duties, professional qualification, housework and the concept of "heavy" and "light" duties.

As a starting point, we took the combination of gender and work as elements that enlighten aspects in which production and reproduction are intermingled in a non-dissociated way. We also point out the importance, particularly in the studies about work, of the demolition of stereotypes and gender attributions which are traditionally arranged in opposite pairs such as public and private, qualified and non-qualified, waged and domestic, productive and reproductive work. In what concerns night work, these issues acquire a particular relevance due to the inevitable inversion of the sleep-wake cycle which, in itself, may impair health and affect the quality of life. Whenever day-time activities compete with the demand for sleep we can conclude that the quality of life is affected in general terms, and the impact of socially built differences between men and women is acerbated. With this study, we tried to establish an interchange between the universe of issues posed by workers and the work of thinkers and feminist authors in the field of work, so as to indicate the path for future actions aiming to promote more balanced relations between man and women.

MOW02:3 Gender Inequality at Home and its Effects at the Work Place

Beauty Samhungy Lancaster Industries, Bulaways, Zimbabve

Aim: To establish whether there is any correlation between gender inequality at home and at work place.

Method: Four female workers were followed in a period of six months mainly at work but asking them questions about their situation at home every morning. A questionnaire was used to assess their state of mind using simple terms like 'happy', 'unhappy', 'satisfied', and unsatisfied mainly in relationship to their position as a woman in the household. Questions would also be asked like, 'whether the women felt the husband or boyfriend was treating them fairly, did they feel that they bad the same rights as their male counterpart? The question would become more specific and ask whether the individual felt that they were equally as important as the male counterparts both in their homes as well as at the work place?

A larger group of women would be more revealing and future studies are planned to do just that and perhaps have the study for longer than two years.

Results: It was found that time and time again those of the four women, who claimed to be experiencing inequality in one way or the other, kept to themselves especially in the presence of male work mates. Their general moral was also noted to be lower than the rest of the workers. They kept to themselves most of the time and had very little to contribute whenever there were any group discussions. They also tend to be more intimidated by the male supervisor as well as their male peers than the women who had gender equality at home. Generally they tend to feel uncomfortable and unsure of themselves in the company of their male counterparts.

Conclusions: Although more work needs to be done on this research, from the above results one can conclude that there is a significant correlation between gender inequality at home and at workplace. Women who experience inequality at home, begin to believe that they are second class citizens to men hence they begin to act that way where ever they are as long as there is male presence.

MOW02:4 Social distribution of Work and Health amongst women in India

Sunita Kaistha and Tanusree Raha India

Although India, with a population of more than 1 billion is undergoing a period of rapid socioeconomic development and cultural change, in which women have begun to assert their rights and give expression to their identity, their status still remains abysmally low, given the hierarchical and patriarchal nature of Indian society. Women still remain behind men in all objective and material measures of well being; economic self-sufficiency, education, nutrition, health and power and decision making.

However, gender is only one dimension of the many pervasive inequalities found in our society. Other inequalities include the gap between the rich and the poor, a sharp urban – rural divide and the ritual division of society into graded stratas called castes (based on concepts of purity and pollution). In Indian society, gender discrimination is inextricably interwoven with other social hierarchies. Gender oppression occurs at a plurality of sites – the home, work place, educational institutions and in matters of health. Gender relations however do not work alone, but interacts with other hierarchies in a complex intermeshing.

A very large proportion of women in India are occupied as unpaid family helpers in agriculture or household production rather than as workers who have a tangible income commensurate with their labour. Vast multitudes of women function within the shadowy realm of the unorganized informal sector and therefore force women to work under oppressive working conditions.

Women's workforce participation, which is an accepted indicator of women's status, does not signal greater autonomy or higher status for women. In India, where women's seclusion within the home is seen as a matter of status, it is women from poor families, from low caste and from oppressed communities who form the bulk of the work force. Among the higher castes that are also wealthy because of concentration of land ownership, women are withdrawn from productive work and her role gets confined to the domestic sphere.

Though the class of working women is not a homogeneous group in composition and economic activity, deprivation and discrimination in common to all of them. They suffer from lack of opportunities to work, and work at low and discriminatory wages. Further, technological changes tend to have a differential impact on poor women's lives and may appear as another constraint on economic options and opportunities open to them.

The status of health of women and the disparities in health between men and women are often critical indicators of equity in a society. Women in developing countries like India are overburdened with the 'triple' burden of household work, outside work and reproductive burden. Most women therefore suffer from malnutrition, anaemia and chronic ill health.

The adverse health outcomes are manifestations of the low value placed on women in a highly patriarchal society and this is most visible at those points of the life cycle when they are biologically and socially most vulnerable, i.e. during early childhood and during their reproductive years. The neglect of girls in infancy and childhood is manifested in high rates of mortality amongst them. In fact, India must be one of the very few countries of the world with a sex ratio unfavourable to women.

In India, girls are encouraged to marry early. Marriage plunges a woman, especially where exogamy is practised, into a state where she is ill equipped to protect her health since she has little support in her conjugal household. At this phase, she is burdened by the reproductive health risks of pregnancy, contraception, abortion and childbirth.

Women who have successfully reared children, especially sons, gain in strength in the household, as they and their children grow older. This is the only point in their lives when they are able to wield real power within their household.

Taking socio-economic factors into consideration, available evidence seem to suggest that socio-economic development does not necessarily lead to favourable health outcomes for women. However, if the economic worth of a girl child in a household increases, gender differences in health and mortality reduces. Amongst the poor socio-economic stratas and lower castes, where women do productive work, especially in the rice growing regions, there is greater gender equality.

The potential worth of a child not only has economic but cultural dimensions too. Amongst the higher caste, which have kinship systems which lay emphasis on patriliny, women are withdrawn from productive work. Whereas women from these castes, because of economic security, should have enjoyed better health status, are often neglected because of patriarchal structures and practices such as non-reciprocal marriage payments in the form of dowry. In India, cultural controls over women and the sexual division of labour vary directly with two important dimensions of socioeconomic status: caste and land ownership.

Though in the last two decades a fairly comprehensive health plan and legal framework has come into existence for the delivery of basic amenities of work and health, implementation remains woefully inadequate.

Some effort has been made by the government and voluntary agencies to improve occupational health by redesigning work tools like chairs for garment stitchers, brooms, baskets, tongs, gloves and masks for cleaners etc. Sadly there arises a problem of the unaffordable cost of re-designed products. As yet no provision for subsidy exists for them.

CONCLUSION:

The lack of social security, increasing occupational health hazard and no access to new technology, skills and information all combine to continue the vicious circle of poverty, illiteracy and increasing unemployment for women in India. The cost of ignoring the needs of health care is very high. Today India is faced with uncontrolled population growth, high infant and child mortality, a weakened economy, a deteriorating environment, a generally divided society and a poor quality of life for all. For girls and women it means unequal opportunities, a higher level of risk and a life determined by fate as well as decisions of others rather than individual choice. Only through strong interventions by the government and the voluntary agencies can we hope to improve the lot of women in India.

MOW02:5 Constructing the deviant other: Motherhood at a workplace

Clarissa Kugelberg Uppsala Universitet

In this paper I relate women's subordination in working life to the constructions of motherhood and fatherhood in working life. My discussion derives from an anthropological study of one work place, but it also relates to further gender research on working life issues.

I treat the constructs of motherhood and fatherhood as generated both in the daily interplay between colleagues and bosses and in discussions about the company and its future. Motherhood and fatherhood gave rise to different associations, which in turn gave women and men different preconditions at the company. This meant that they faced different expectations among bosses and colleagues; they were evaluated differently and were met with different attitudes. When interpreting others' expectations and evaluations the mothers and fathers shaped their images of their entitlements and duties. The interplay at every department constituted a specific variation of the company's culture and this gave parents different preconditions. The superiors' ideology and work organisation had great influence.

The image of the mother as a "productivity problem" was part of the surrounding world of women at the company. To a different extent it appeared at the work place, in serious and joking comments, in how they themselves were treated and in what they saw and heard of how others were treated. The department of Human Resources promoted family friendly policies towards women by facilitating part-time jobs for them as well as flexible working hours and less exposed positions. At the same time this put the women in a special category defined by their special needs, and so underpinned the view of women as problematic.

Fatherhood was not assumed to affect working-life and individual fathers' jobs in the discourse about the organisation, the ideology and goals of the company. But fathering existed in the stories of men's daily work; men's parental duties were recognised as affecting their work. In departments based on self organised working teams, there had been an increase in shared responsibility for work and tolerant attitudes to the individual's need for child care leave. In these departments, the view of a caring father was constructed in daily practice.

MoW03: Chemical Exposures, 2

MoW03:1 Mortality among Females in the U.S. Man-Made Vitreous Fiber Worker Cohort

Roslyn A. Stone University of Pittsburg, USA

The recently updated and expanded historical cohort study of 32,110 workers employed one year or more in any of 10 U. S. fiber glass manufacturing plants included 4008 female workers (12.5%). The initial reports focused on the total cohort, the smoking-adjusted exposure analyses were limited to male cohort members. We report here the overall 1946-92 mortality experience of the female workers in this cohort, as well as a detailed examination of respiratory system cancer (RSC) mortality (53 deaths) as a function of estimated exposure to respirable fibers and potential coexposures to formaldehyde, silica, asphalt, phenol, styrene and urea. Respirable fibers and formaldehyde were quantified as cumulative and time-dependent average measures, in separate analyses. Because smoking data were available only for a small subset, these analyses are not adjusted for smoking. We also characterize the jobs held by these women and profile their occupational exposures during heir years if employment in these plats.

Among white females, no statistically significantly elevated standardized mortality ratios (SMRs) were observed for all-cause mortality (922 deaths), any of the 25 nonmalignant causes considered, all malignant neoplasms (264 deaths), or any of the 27 malignant causes considered. The SMR for on-malignant respiratory disease (excluding influenza and pneumonia) was , 1.03 (with 95% C.I. .75-1.39), based on 44 deaths. The SMR for RSC mortality was 1.03 (95% C.I.77-1.35) among all white female workers, and 1.22 (95% C.I..80-1.79) among white female workers employed 5+years in these plants A total of eight death were observed among non-white female workers. Based on internal cohort comparisons, no statistically significant associations were observed between RSC mortality and exposure to respirable fiber or any of the other agents considered.

MoW03:2 The aetiology of occupational disease and oppression of women floricultural workers in Kenya

Ahmed A.Taib HSE Consultant, Nairobi Kenya

Development notably, brings along many benefits including better health-quality of life, financial growth and economic stability, infra-structural development and even industrialisation. However, for the countries on the road to development, those so often referred to as developing or "third world". The road to this elusive goal is not without a myriad of obstacles, chief amongst them poor Occupational Health and Safety Management, particularly with regards to women workers. A good example being the fate that continues to accost women workers in the multi-million dollars floricultural industry in Kenya.

In a country, like many others in the Sub-Saharan Africa, where atone age adages of gender inequalities and disparities are rampant even at the highest level of governance. To be a woman in Kenya is difficult, to be a woman farm worker is not only a nightmare, but also exposure to the

worst form of modern slavery, particular in the era of unemployment and economic recession where every penny counts.

Occupational Health and Safety management remains one of the most neglected and often ignored issues of basic human rights, where employers as is the case of the floricultural industry in Kenya, where 90% of the workforce are women. Continue to ripe huge profits at the expense of exposing the workers to all manner of risks and hazards to their health and lives.

From respiratory diseases, ophthalmic disorders, noise induced deafness, obstetrics and gynaecological, malignant metanoma to work induced skeletal muscular disorders the list of Occupational diseases that remain a bane of women workers in Kenya is endless.

The paper seeks to outline causes of the current situation, expound on the knowledge gap existing on global workers Safety and Health rights in Kenya, legislative malpractice and lobby for international support particularly within the European market forces in alleviating the problem. The paper also seeks to bring to light, the outright abuse and gender disparities that continue to remain the bane of women workers at large and the urgent need for pressure for good governance, adoption, ratification and strict implementation of international protocols and conventions in Kenya and the Eastern Africa region at large.

MoW03:3 Evaluation of Living and Agricultural Working Conditions in Female Farmers

Nguyen Bich Diep et al. National Institute of Occupational & Environmental Health

Half of the world labour force is employed in agriculture and an estimated 1.3 billion workers are engaged in agricultural production. The share of agricultural labour force in total economically active population is under 10% in developed countries and accounts for 59% of workers in the less developed regions. In Vietnam, Approximately 80% of population are involved in agricultural production. The female labour force account for 51,4% of total country labour force, in which 72% work in agriculture.

The study was conducted in some important agricultural provinces in Vietnam to evaluate the living and working conditions of female farmers and to give recommendations on measures of health promotion and improving living and working conditions for female farmers.

Investigation was carried out by questionnaires on population, cultivation areas, distribution of female labour force, structure of agricultural production in studied districts and communes and interviewing female farmers about living and working conditions, use of pesticides and other agricultural chemicals in house holds.

The results of study showed that the number of people at working age account for 46.5-55.2% of total population, in which female labour force constitute 52-55.5%. The investigated female farmers were mainly at the age 26-45 years old (constituted 72.7%), with educational level of primary and secondary school (84.9%). They were married (88.8%). Their jobs were cultivation of rice and industrial plants (74.8-80%). The living conditions were poor and did not meet standards of environmental health: 30.3% and 17.5% of house holds still used rain and river, swamp and pond water respectively as living water; the welfare facilities such as toilet were still lack and unsanitary (49.5%). Their income was low: the annual average income for a household including 4-5 members was approximately 13,3 million Vietnamese currency (equivalent to 886 US \$). The working conditions comprised of many risk factors causing occupational diseases and work related injuries.

They work in open air and exposed to the rain, wind, cold, heat and ultraviolet radiation. The working time long lasted: they work in average 9-17h/day (53.5%). The agricultural work was mainly manual and semi-mechanised. Different kinds of pesticides and agricultural chemicals were used, some of which was forbidden to use such as in almost investigated provinces (2-4,6 %); Monitor and Wolfatox. About 26.2% of female farmers sprayed pesticides, this prevalence was much higher in Northern provinces (64.5-71.7%). Estimated half of spraying female farmers were instructed safe use of pesticides by agricultural and medical staffs. 40.4% of total sprayers used personal protective equipment (mainly masks). Pesticides were provided by private pesticide shops, constituted 59.2%. The health care services were insufficient and unsuited to agricultural workers' needs due to lack of man-power: there was in average 1 doctor /13,350 people, 1 medical staff/ 1,543 people. 80.5% of female farmers were not been examined their health annually.

The authors proposed that government with concerning ministries and organizations should develop the legislative documents stipulating occupational health and safety in agriculture. The Health Center at grass root level should be improved in infrastructure and manpower in order to provide appropriate health services in general and occupational health services in particular to farmers in rural areas. Health education and training should be strengthened on occupational health and safety and health promotion and improvement of working conditions.

MoW03:4 Pesticides and Breast Cancer in Women

Gine Elsner ^a, Albert Nienhaus ^{ac}, Andreas Seidler ^a, Patricia Bock ^a, Winfried Keil ^a and Manfred Kaufman ^b

In a hospital based case control study pesticides were studied as risk factor for breast cancer in women. The study comprises 415 cases and 377 controls. Information on confounder such as number of conceptions, duration of breast feeding, age at menarche and menopause, use of oral contraceptives, smoking and genetic disposition were collected by self administered questionnaire. Information on the life-time use of pesticides was obtained by extensive inter-view covering potential situations for the use of insecticides, rodenticides, herbicides and wood preservatives

Insecticides, rodenticides, herbicides and wood preservatives showed a slightly elevated odds ratio but none of the ratios was statistically significant. The highest adjusted odds ratio was found for wood preservatives (OR 1.5 95% Cl 0.9-2.5). A more detailed analysis yielded an elevated odds ratio for treatments against head and felt licc when the treatment was done before 1960 (OR 3.7 95% Cl 1.3-11.1). This suggest DDT as the causal agents because before 1960 DDT was the treatment of choice for head lice. An elevated odds ratio was also found for fighting greenflies on indoor plants (OR 1.8 95% Cl 1.3-3.3). As causal agents HCH might be discussed because it was wildly used as insecticide and its potential to cause breast cancer is reported in literature.

- a) Institute of Occupational Medicine, Johan Wolfgang Goethe-Universität, Frankfurt am Main
- b) Centre for Gynaecology and Obstetrics, Johan Wolfgang Goethe-Universität
- c) Institution for Statutory Acccident Insurance and Prevention in the Health and Welfare Service, Department of Statics and Epidemiology Berufsgenossenschaft für Gesundheitsdients und Wohlfahrtspfiege (BGW) Hamburg

WoM03:5 Agricultural pesticide exposure and health risks associated with women handling and using pesticides in Tanzania

F.T.Mununa and E.E. Lekei Tropical Pesticides Research Institute (TPRI), Tanzania

Pesticides in Tanzania are used in agriculture for crop protection, and for improvement of livestock production, human and animal health. In Tanzania and other developing countries, pesticides have made a very significant contribution towards increasing food quality and quantity. In developing countries including Tanzania, the labour force particularly in agriculture consists of women. Hence women are directly involved in the application of pesticides for pest and plant disease control. Most of women are poor, illiterate and they lack proper knowledge of pesticide handling and use. All of these factors may lead to misuse exposure and eventually cause health risks. The use of agricultural pesticides against various pests and diseases is of vital importance, but such substances can create health problems to women particularly if they misuse these products or if safety precautions are not observed during handling. Hence it is absolutely necessary for women engaged in pesticide handling and use to follow the laid down procedures of handling or using pesticides.

In Tanzania we have a preventive pesticides registration scheme under which it is prohibited to import, sale, distribute, manufacture, and formulate pesticides, before a permission is granted. This scheme has a positive role to play in the safe and effective use of pesticides. Firms dealing with pesticides business in Tanzania including, retailers, fumigators, importers, formulators and manufactures are licensed and they are required to handle pesticides as stipulated in the plant Protection Act 1997 and pesticides control regulations. Besides that, pesticides handlers are required by law to be conversant with pesticides use and hence be able to supply only authorized pesticides to end users and provide them with the necessary information on how to use the product effectively and safely.

The main purpose of pesticide legislation is to achieve an adequate system of control of pesticides at the point of entry and in the market. Day to day observations indicate that small-scale farmers who include mainly women are not given relevant advice on the pesticide use. The small-scale farmers are aware of the importance of pesticides, but they are not conversant on how to use and handle them safely. A significant number of pesticides exposure situations usually occur to women during mixing and spraying. This exposure may be caused by various reasons including non-compliance with instructions on the safe use of pesticides.

The aim of this paper is to address exposure of pesticides and pesticides risks to women who are directly engaged in handling and use of agricultural pesticides in Tanzania and recommendations to minimize pesticide exposure.

MoW03: Women's Health Conditions after Occupational Chemical Exposures

Carme Valls-Llobet

Centro de analisis y programas sanitarios, Paris, Barcelona Spain

AIMS: To identify and monitor patients affected in work place by chemical insecticide application To observe changes in four years following health problems: clinical, neurological, hormonal metabolically, menstrual and autoimmunity troubles

METHODS: We have developed a protocol to study chemical exposures after insecticide (organophosphates o organochlorines) in work centres. First we identify through the Barcelona Questionnaire, people affected and severity. We have identified till now, 325 women and 11 men.

More severe people affected (114) have been studied with determination of: Erythrocyte cholinesterase levels, Hypophysis hormones, GH PRL; TSH, LH; Betaestradiol and progesterone (IRMA): ANA: Citomegalovirus and antithyroidals antibodies. Hematologic test; ferritina, Lactic and pyruvic acid, neurophysiological study and SPECT.

RESULT: Severe o moderately affected people present: 100% neurophysiological distrubance (frontal syndrom), 94% menstrual disorder, 75% increased autoantibodies antithyroidals and cytomegalovirus; 82% 17 Beta estradiol increased in luteal phase, and low progesterone level 95%; 95% low ferritina levels (7±6 nm/l); 64% GH increased (6-27 UI) indicating a parasympathetic tonus hypothalamic by acethilcoline increase; 85% pyruvic level low indicating mithocondrial damage: 60% of sample present a low cerebral perfusion by SPECT.

The problems persist of worsen four year after the first exposition.

CONCLUSION: Consequences on health after insecticides exposition are time persistent and multisystemic, and need a close monitorage of affected people in order to treat complications, by a multidisciplinar team of clinics, neurologist and laboratory.

MoW04: Working and Living Conditions in Different Types of Labour

MoW04:1 Gender roles and health among female workers in export processing zone, Sri Lanka

Chamila Attanapola

Norwegian University of Science and Technology, Trondheim, Norway

As a result of Sri Lanka's entering into the global economy, since 1980s, many young, educated and unmarried women get an opportunity to participate actively in the income receiving production in export processing industries of the country. Although globalisation and industrialisation did not marginalise these women, they may be exploited by the employers of industrial enterprises. These female workers have started their work as young and healthy women. After few years of employment at the factories they suffer from different kinds of illnesses. Many workers suffer from headaches, limb aches, back aches and breathing problems, stomach problems, eye problems, depression, dizziness and weight loss. Many empirical studies relate to these health problems as results of unhealthy working and living environments.

In contemporary health studies with gender perception, many have focused on the differences between men and women's health. It is important to understand why (the gender roles and practices) and how (subjective understanding) women suffer from different kinds of illnesses in order to promote better health. In this paper I intend to analyse the gender roles related health problems and how they suffer and cope with their health problems, and how curative, preventive and promotional strategies may be created.

We can identify three gender roles of female workers with relate to three types of work they do. The first role is as the good, obedient daughters of parents. These young women have joined the labour force and forced to seek jobs at export processing zone in order to support their extremely poor families or to obtain some personal items before they get married. Their reproduction work and responsibilities as nurtures and breadwinners of the family affect their health in different ways. On the one hand, migration and adapting to the new living and working environment have lead to different kinds of mental and physical illnesses, such as depression and weight loss. On the other hand, in order to satisfy family needs, these women are forced to prostitution as the easiest way of earning money. Unwanted pregnancies, abortions, and sexually transmitted diseases are common problems among these women.

The second gender role is affiliated to production work; as an efficient and cheap labourers. This role leads to unhealthy practices such as longer working hours, repetitive work, and poor working conditions. Aches in different body parts, eye problems and breathing problems are results. On the other hand, cheapness leads to lack of enough money to provide themselves with better accommodations with proper sanitary conditions, electricity and water supply. Unsanitary accommodation leads to hygiene problems and sometimes epidemics among workers at export processing zones.

The third role as the good, moral and culturally respectable girls of the community. These girls were socialised to become good, moral and culturally respectable girls. In their village, their relatives and other females and males treated them respectably. But, when they migrated to the city,

they have lost the background, in which they were being respected. In the zone area, people regard them as lower status, since they work at factories for low wage. Many men try to take advantage of these young girls and this leads to unnecessary pregnancies sometimes life-threatening conditions because of illegal abortions. Since some women involve in prostitution, society condemn all the female workers and disrespect them. This situation affects them mentally and physically, and always in the fear of being attacked or raped when they arrive from night work.

I intend to identify these women's strategies with regard to health promotion. Role of non-governmental organisations would be analysed sincenumber of NGOs work with these women in empowering them for legal rights and self-protection.

MoW04:2 Waged and Domestic Work in a Group of Women with Neck/Shoulder Pain

Christina Ahlgren ,Umeå University

In order to describe the whole life situation in a group of women with work-related neck/shoulder myalgia an assessment of waged as well as domestic work was done. The women were 38 years of age, had suffered from neck/shoulder pain for a median time of 8 years, rated pain in general as 41 mm on a 100 mm VAS scale, and had lower pressure pain threshold in the trapezius muscle. They were fully employed and none had had more than 30 days of sickness absence during the previous year.

Method: Assessment of physical and psychosocial work-load in the workplaces of 90 women was done 1995-96. Data were collected with questionnaires, diary and direct measurements during ordinary work. Measurements on physical exposure included heart rate during work, working postures and repetitive arm/hand movements. Psychosocial exposure was assessed using a questionnaire by Karasek and Theorell. Domestic work as use of time for household work and child-care respectively was collected with a diary. The degree of responsibility for the same areas was reported in a questionnaire. In a three-year follow up data on the severity of the disorder, sickness absence and work situation were asked for.

Results: A large majority of the women were white-collar workers in the public sector and 80 % worked full time working hours. In addition women with children at home used 16 hours/ week for household work and 17 hours /week for child care. Sixty percent of the women with children at home had more than half of the responsibility for the child-care and 80 % more than half of the responsibility for the household work. Physical exposure at work was rated as low, 12 on Borg's RPE scale. The dominant work posture was sitting accompanied with repetitive arm/hand movements. To have to work fast was a unanimous experience and more than 80 % of the women experienced job strain. In the three-year follow up the neck/shoulder disorders were unchanged, still 82 % were in waged work. Sickness absence had increased and six subjects had more than 30 days of sickness absence during the last year.

Conclusion: Women with work-related neck/shoulder myalgia are exposed to low general but high local physical work-load. They experience stress at work and take responsibility for the majority of the domestic work.

MoW04:3 The Association between Psychological Workload and Body Weight. Is there a Causal Effect?

Dorthe Overgaard Copenhagen University, Denmark

Title of Abstract: The association between Psychological Workload and Body Weight. Is there a causal effect?

Background: The literature on body weight/weight change and its association with workload is limited. Since Karasek introduced his job demand/control model in 1979 as a tool for measuring workload, a body of research have shown associations between workload and coronary heart disease, but there have not been research on women's weight/weight change.

Existing cross-sectional studies have shown that some women will increase eating when stressed, {Netterstrøm, 1993; Hellerstedt, 1997; Amick, 1998}. Other studies have shown that people of normal weight will decrease their eating when stressed, whereas eating by obese individuals is unaffected by stress {Schachter, 1968; Greeno, 1994}. In 1998 in a prospective study Landbergis found no association between workload and body weight.

Aim: The aim of this present study is to perform a critical review of the literature for a possible causal association between psychological workload and body weight/weight change.

Method: The method used was a systematic search carried out using Medline from 1966 and onwards and PsycINFO from 1989. Furthermore, sociological periodicals were screened for abstracts from the period 1986-2001. Fifty-seven international original articles were identified. Thirteen cross-sectional studies have addressed the issue weight change and its associations with psychological workload. Only one study was longitudinal with prospective data.

Hypothesis: An increase in job demands and low decision latitudes is associated with an increase in body weight.

Results: In this review the evidence and the different study findings are generally equivocal and the results of the studies show a weak associations between workload and body weight. Besides workload might be a possible risk factor for abdominal obesity for men.

Another result was seen among women where high job demands were associated with high BMI, indicating an increase in overall obesity.

Conclusions: This review shows a weak association between workload and bodyweight/weight change according to Hill's nine criteria.

MoW04: 5 Situation of Working Women in Bangladesh - A Study of A Garment Factory in Dhaka City

Nargis Akhter University of Tampere

The garment industry of Bangladesh has been expanding rapidly since late 1970s. According to BGMEA 2600 garments factory have been established in Bangladesh during these years. About 15 lakh people are working in these garment factories. The growth of export oriented industries in Bangladesh in the last decade has created opportunities for factory jobs for women. The garment industry has provided women with access to gainful employment. About 90 per cent of the workers in Bangladesh's RMG sector are women, which constitutes almost 70 per cent of the total female employment in the country's manufacturing sector. Though garment industry has given an economic identity to numerous female workers, women's employment and contribution to economic activities

remained unrecognised for many decades. In the garments industry 45 per cent of the workers are unmarried, 19 years or younger and 69 per cent of them are migrants from the rural areas in comparison with 17 per cent of male workers. A study shows that 50.5 per cent of those women had received 6 to 10 years of schooling and also receive training on the job. This vast majority of women who is doing great contribution for the country is ignored by many way. They are working from morning to night in over crowded places where the vulnerability to diseases is likely to be very high in such a working condition. Even they could not enjoy any holidays. Moreover, despite similarity in education and experiences, female workers' wages are about half of that of a male worker. The occupational mobility of female workers is limited due to a deeply entrenched view that certain occupations such as manager/executive are less. This discrimination is also common in garments industry where requirements of education are less. The highest paid jobs of cutting-master, supervisor and quality controller are the domain of men.

Women have traditionally been participating in developing national economy without much recognition. To understand properly and acknowledge or recognise women's role in development is vital for a developing country like Bangladesh. Theoretically, there is no constitutional barrier for women to participate in different spheres of life, but in reality the situation is different. Women feel discrimination in all spheres of economic, social and political life. There have been few systematic studies done to identify the real status of women in garments industry and their role in national development. So I would like to assess, identify and evaluate the real situation of those women. The proposed study will look into the discrimination against women who are working in garment industry. I decided to conduct my study in Arnab garment, which is situated in the capital city of Dhaka. The study is based on combination of some research methods namely: literature review, case study through in-depth interview, questionnaire and survey and interview by random sampling. The duration of the research is five years beginning from January 2000. During the first three years the first phase of the study will be ready and will be submitted as Licentiate Thesis by the end of the year 2004. The second phase of the research will be ready and submitted to the University of Tampere as Ph.D. Thesis by the end of the year 2005. If I can do that properly I think it will serve as a positive result for further research and for the planners who can go ahead with this recommendation to improve the overall situation of those women. In my paper, I will deal with the issues concerning the situation of working women in garment industry in Bangladesh.

MoW04:6 Maternal's work, living conditions and pre-natal care

Ida M. Vianna De Oliveira, Rosangela E. Mineo Biagolini, Elizabeth Fujimori and Ana Paula C. Araujo Moreira School Of Nursing of the University Of São Paulo

Introduction: The women's entrance in the productive activities has been transforming the private family's space, traditionally the women's space of actuation and production. Considering the reproduction of the familiar nucleus, the expansion of women's social responsibilities has profound implications in their well being as well in that of their family. In Brazil, both the rise of women's participation in economically productive activities from around 30% in 1981 to nearly 50% in 1997 and the prevalence of social exclusion conditions increased the conflict between mother's "productive" and "reproductive" roles. The unconcluded answers to the generated questions about the effect of maternal work in the well being of their children justify the continuity of studies taking into account these object.

Objective And Theoretic Model: Taking as a guide the theory of the social determination of the health-illness process and using a theoretical model that takes the social reproduction category as its center, it aimed to understand the working and living conditions as intrinsically related indicators of the production and consumption moments of the family. Thus, the objective of this study was to identify the working and living conditions of the mothers of children under 7 years age and to determine the dimension of the relationship between their social reproduction patterns and their prenatal care.

Methodology: The population study - defined by a larger investigation - was composed by 349 families living in the health care area of the University of São Paulo Hospital. Of these totals of randomly selected families, 80 that had children under 7 year's age constituted the sample of this study. The data was collected by recordatory method through home interviews, carried out by previously trained nurses and nursing students. To identify the patterns of women's participation in the workforce it was utilized the "Brazilian Occupational Classification" (CBO, 1994) and to characterize their pre-natal conditions it was considered their access to assistance care and their weight gain during the gestation. The nutritional status of the mothers during the gestational period was classified according to Corporal Mass Index (CMI) and evaluated by the CMI categories proposed by the IOM/NAS, 1995.

Results: The results showed that 60.0% of the mothers studied were engaged in paid work. About 41.8% of these working mothers who had wages presented the best situation in the productive activities (worked in service jobs; tertiary sector of the economy). Thus, they received work benefits, had qualified labor (40.0% were autonomous or employers), had better month income (13.2 minimum wage) and education (11.8 years of schooling) than the others. Mothers working in commerce activities (25.6% of the workers women) were distributed among autonomous and employers (27.3%), formally employed (27.3%) and informally employed (45.5%). These data pointed heterogeneity among these women, including disparity in the women's income and education. The mothers working as maid or domestic servants (32.6%) presented the worst social condition (mean income of 2.3 minimum wage and 5.2 years of schooling). The familiar income per capita, the working conditions and the education of the family head reinforced these results: it was verified among the domestic servants, a proportion significantly high of the families headed by women and the worst working conditions. The maternal work conditions could be considered as a potential indicator of the social reproduction of their families: it was demonstrated that the domestic servants families had the worst conditions, and the others families had the best situation, especially related to household conditions (house property and type, number of people sleeping in the same room, bathroom localization), home utilities availability, social life integration and risk exposition (violence, traffic accidents, landslide and flood). In the group of women engaged in commercial activities, a contradictory result was found: there was house owners and families living in invaded properties. It was observed that 9.9% of the total of the women did not have access to pre-natal care. They were significantly concentrated (90.0%) in the group with unqualified social reproduction pattern, that was the group of the domestic servants. Additionally, these women, when excluded from pre-natal care, presented weigh gain significantly smaller than others, who had access, did.

Conclusions: These results indicated that inadequate women's work conditions were related with the worst living conditions and pre-natal care exclusion. This fact contributed to the wasting of the maternal conditions, expressed by their worst weight gestational gain.

MoW05: Gender Sensitive Methods in Research on Work and Health

MoW05:1 Is Qualitative Research Becoming a Female Enterprise?

Eva, E. Johansson, Gunilla Risberg, Katarina Hamberg, Göran Westman Umeå Universitet, Sweden

Aim: The aim was to analyse if physicians` assessment of scientific quality regarding research design, a quantitative and a qualitative, and also whether gender influenced their attitudes.

Design And Subjects: Two fictive, but realistic research abstracts on back pain treatment were constructed, one with a quantitative and one with a qualitative design. The authorship was randomly assigned to either a male or female researcher. 1662 randomly selected Swedish physicians were asked to judge the scientific quality of the two abstract designs by filling out a structured assessment form. The assessments of 1364 abstracts (made by 286 female and 394 male assessors), were analysed by chi-square test and logistic regression.

Results: The quantitative abstract was judged the same, whether the author was a man or a woman, by both male and female assessors. The qualitative abstract, however, was ranked as more accurate, trustworthy, relevant and interesting when the author was a woman. Women assessors, compared to men, were significantly more appreciative of women authors. Non-hospital compared to hospital physicians were more appreciative, while PhDs evaluated the qualitative abstract as less acceptable than MDs did, especially when the author was a man.

Conclusion: Scientific standards and research designs seem to be gendered, as male and female assessors have different opinions on the same qualitative design. The results are worth considering in situations where research is judged and interpreted, in medical tutoring, mentoring and research guidance, and certainly in forming evaluation committees for research funding.

MoW05:2 Is applying a Gender Perspective in Medicine an Issue for Women Only?

Gunilla Risberg Katarina, Hamberg Eva, Johansson Göran Westman Department of Family Medicine NUS Umeå

Purpose: To investigate to what extent teaching physicians' gender influence their attitudes towards a gender perspective on health care and medical education.

Method: A Questionnaire was sent to all 464 senior physicians (29% women), supervising medical students at a Swedish university. The physicians were asked to rate, on VAS-scales, the importance of gender in consultation, tutoring and other professional encounters. By using chi-square-test logistic and linear regression was assessed if there were differences in gender attitudes depending on the physicians gender.

Result: The response rate was 65%, somewhat higher for women than for men. Women gave significantly more importance to gender than men in all aspects surveyed. The same pattern between women and men persisted across speciality belonging, age academic degree and years in profession. Primary care doctors gave significantly more importance to gender than hospital doctors, especially surgical doctors. This was only partly explained by a higher percentage of

women among primary care doctors. Academic degree, years in profession and age had marginal or no impact on gender attitudes.

Conclusion: Women doctors found gender more important in their work than men did. This reflects cultural norms about women and men. Students and teachers (both women and men) need to reflect upon gendered expectations and the influence it may have on their professional role and practice. To achieve this we need motivation of teachers, educational efforts and results from gender research in medical curricula. Otherwise gender issues will continue to be "women issues"

MoW05: 3 Gender Bias Involved in Physicians' Management of Neck Pain – A Study of the Answers at a Swedish National Exam

Katarina Hamberg Gunilla Risberg, Eva, Johansson and Göran Westman Umeå University

Purpose: Research has raised concerns about gender bias in medicine, i.e., are women and men being treated differently due to gender stereotyped attitudes among physicians? We investigated gender differences in the management of neck pain as proposed in a written test. The design eliminated differences related to communication and patient behaviour.

Method: At a national exam for Swedish interns, using modified essay questions, the examinees were allocated to suggest management of neck pain in either a male or a female bus driver with a tense family situation. The open answers were coded for analysis. 239 intern (41% women) participated. Chi2-tests were used to measure differences in proportions and t-test to evaluate differences in means.

Result: In certain areas gender differences were detected. Proposals of non-specific somatic diagnoses, psychosocial questions, drug prescriptions, and the expressed need of diagnostic support from physiotherapist and orthopedist, were more common in the female case. Laboratory tests were more often requested in the male. Case. The gender differences made by male and female physicians were mainly in the same direction. However, male physicians underlined patient compliance foremost in the female case while female physicians did the opposite. Furthermore, female physicians seemed to take a larger responsibility for the patient in the female case.

Conclusion: The result suggest that physicians' gendered expectations are involved in creating gender differences in medicine. To include gender theory and discussions about gender attitudes into medical school curricula's are recommended approaches for an awareness of the problem.

MoW05:4 Gender Differences in Occupational Health Care Interventions

Catelijne Joling
Maastricht University

This study focuses on gender differences in chances of receiving treatment by the occupational physician. Reason for the present study is the fact that the chance to become disabled for work is higher for women than for men. There are two possible explanations for the occurrence of gender differences in work incapacity. The first explanation is that these differences can be attribute to certain gender specific characteristics related to health, working conditions, opinions and attitudes. The second explanation supposes that gender differences in work incapacity can possible be attributed to differences in chances of treatment (i. c. intervention) by health care professionals. It is

argued that there is a certain amount of selectivity present in the application of interventions. This study analyzes gender differences in chances of receiving an intervention. The intervention studied is treatment by the occupational physician. Determinants of the probability of receiving such an intervention are identified. Elapsed time (duration) up to the intervention is one of these determinants, because a dynamic interdependence exists between duration and behaviour of the individual (duration dependence), The research question that are examined in the present study are (1) what determines the chance that men and women receive an intervention, and (2) what determines how rapidly men and women receive an intervention? Analyses are performed using data from a major longitudinal survey on work incapacity and return to work in the Netherlands. Subjects include all employees that were on sick leave. A proportional hazards intervention, as well as the relationship between the elapsed duration and an intervention. The risk of a change from one state to another (hazard rate) is assumed to follow a Weibull distribution Coefficients of the hazard rate are estimated with Maximum Likelihood. For en and women expected durations up to the first appointment with the occupational physician are calculated. The influence of predictors like educational level, occupation, industry and previous absence record on the expected durations are determined. Results show a significant gender difference in the chance of receiving an intervention from the occupational physician. Due to several characteristics, women seem to have a higher chance of receiving an intervention from the occupational physician than men. A decreasing hazard rate is found for both men and women, which indicates a negative duration dependence. The hazard rate for women is higher than that for men, however. This implies that as the sickness absence process elapses, women's chances of receiving an intervention increase relative to those of men. This seems paradoxal because in spite of the fact that women have higher chance of receiving and intervention, more women than men become incapacitated for work. Explanations for this are found in economical, psychological and sociological theories.

MoW05:5 Detecting the Causes of Time Pressure: A Gender Perspective

Noora Järnefelt Statistics Finland, Helsinki

Over the past two decades experiences of time pressure at work have increased in all European countries where time series data are available, and a similar trend is present in the USA, Canada and

Australia as well. Despite extensive research on stress and well-being aspects of time pressure, the causes of time pressure at work are still not well known. This paper tries to look closer at what the processes that intensify work and cause the lengthening of the working day are. Furthermore, we examine differences in how these processes reflect on female and male jobs. Special interest is in how wider social factors (e.g. economic competition, economic difficulties of welfare state) produce intensification and lengthening of working times through work and organisational level factors (e.g. management strategies, customer orientation, demands for productivity, efficiency and flexibility). When investigating gender differences in work intensification and in the lengthening of the working day the case of Finland is particularly interesting: the proportion of women in paid work is high, the occupational structure is highly segregated by gender and women in paid work experience more time pressure than men. The study is based on triangulation of qualitative and quantitative analysis. The data consists of the Finnish Quality of Work Life Survey and of 23 qualitative interviews (10 males, 13 females) to employees in different occupations who experienced high time pressure according to a quantitative measurement. Analytical categories of the causes of time pressure were formed on the basis of the qualitative interviews following the

grounded analysis principles. Where qualitative categories and survey questions could be matched, relations between these "cause" categories and time pressure indicators were calculated from the survey data in order to draw conclusions about causal relations. Analysis shows how the economic difficulties of welfare state has intensified the work in public sector, which is typically performed by women. In the case of men, the intensification of work is more strongly affected by economic competition in private sector. Difficulties arising from manifest ambitions to meet customers' needs, interruptions and fragmented workday, and from difficulties in planning the workday seemed also more typical in female jobs than in male ones. Therefore, the study suggests that gender differences in time pressure experiences are at least partially attributable to the requirements set by the type of work men and women perform. To put it in another way, the meaning of gender is "done" in the organisation and in the terms of gender-specific work. Findings also indicate that extending of the working day is rather a result of demands and competition in working life than a sign of an individuals attraction to work over family life.

Methodological triangulation brought into light new features of the causes of time pressure which traditional, purely quantitative approach has been unable to discover. Such was, for example, the role of the superior in generating and controlling time pressure at different levels of work organisations, which current survey questionnaires fail to capture. These findings indicate that triangulation might facilitate further theoretical and methodological research into time pressure and other complex working conditions phenomena.

MoW05:6 Workplace health promotion - results from a participative intervention study

Hanna Arnesson University of Linköping

In the study to be presented workplace health promotion is suggested to be based on a gradual development of individual empowerment, possibly imposing organisational changes.

A workplace based health promoting intervention was implemented in the autumn of 2001 in Linköping, Sweden. Three organisations with all together 130 employees participated. The intervention method is based on a pedagogic method; problem based learning. The method is structured and aims to promote empowerment and social support for the participants. All employees at each workplace worked in small groups according to the method once a week á 2 h for four months. The study design is longitudinal. Results: A preliminary analysis shows that health promotion strategies initially was directed towards establishing arenas/supportive climate at the workplace, eg. scheduled formal and informal meetings, social events, structures for information and communication at the workplace. Once established, the groups proceeded with organisational matters, eg. time schedules, routines for employees participation in organisational development, leadership, stress management. Conclusions: The social capital at the workplace comprising network and social support, is an essential, possibly necessary basis for further health promoting stretegies of the organisational level

MoS01: Everything to gain

Chair: Eva Fernvall Markstedt

Organiser: Swedish Association of Health Professionals

MoS01:1 Everything to gain

Eva Fernvall Markstedt Swedish Association of Health Professionals

No matter where we find ourselves in society, we are influenced by unwritten rules that direct our attitudes and actions as men and women. We all live under an agreement without actually being aware of it, an agreement that has consequences for the individual, society, the family and working life. The so-called "gender contract", the silent agreement between the sexes in society! We have made some progress, but much remains to be done.

The most obvious indicator of this invisible contract is the gender split that we find in the labour market, where more women work in the public sector and more men work in the private sector. Women often work under different conditions than men, under organisational structures characterised by subordination, fewer opportunities for professional development and less space for individual decision making. The consequences of the "gender contract" also have an impact on the working environment and health. Today, sick leave is increasing most among health care staff, (i.e. women). At the same time, it has been shown that women receive inferior rehabilitation services in relation to those received by men. Historically, diseases related to the work and health of women have been given less attention. What are the reasons? Can the explanation be found in biological differences? To a great extent it is a matter of values, but it is also about knowledge.

Attitudes and values also guide how we raise children and what is expected depending on whether it is a boy or a girl. At the same time, children become aware of their social value. Interaction with others determines how one acts as a girl or a boy. This is balanced or reinforced by adults in the surrounding environment, and with time it is reflected in the opportunities of working life. In a society with a gender hierarchy, access to care and health also becomes a gender issue. What does equality look like from the patient's perspective? Naturally, the power structure in society influences patients and care providers alike. Studies have shown that male patients tend to receive more attention than female patients do. Unfortunately, too little is known about the way that nurses, midwives, or laboratory technicians interact with patients from a gender perspective. However it is important for each of us to consider our own role in this invisible system where attitudes and values impact on our professional work in health care.

The following topics will be addressed in this symposium:

Our common responsibility - A Presentation of the Platform on Equality by the Swedish Association of Health Professionals

Resistance and Ambivalence, the Role of Men in Gender Equality Policy Implementation Identityprocesses and Intra-Occupational Sex Segregation in Gender Mixed Work places HIV/AIDS Among Zambian Nurses

Workplace Violence in the Health Sector ILO/INC/WHO/PSI

MoS01:2 Our Common Responsibility

Albinson Margareta Swedish Association of Health Professionals

Equality is a matter of concern for women and men alike. It is an issue that affects our circumstances and our opportunity for a good life. It leaves its mark on us as individuals and on our families, our work and society in general. We live in a society where a silent contract between women and men influences what we take responsibility for and what we have power over.

This so-called gender order affects our lives in many ways. Not only our daily lives where both compensated and uncompensated jobs (and associated influence) are unequally distributed, but also in working life, where that order guides both health care and professional groups and the contract that women and men have with each other.

The gender contract, simply illustrated, results in women commanding all of the parental leave while men continue to live and work as if they had no children. The outcome is a strongly segregated labour market, the consequences of which strike women with full force, particularly when the time comes to receive pensions. It also means that men do not participate fully in caring for children.

Equality is not a hollow concept – it is a matter of flesh and blood, for women and men. Equality is a prerequisite for reaching one's full potential – as a parent, a professional, a citizen, a human – independent of a gender stereotype. Obviously, we must have legislation and clear signals defining what society accepts and aspires to. Yet, and most importantly, we must change the gender contract itself. And here, we – women and men alike – are important actors. Together we must become enlightened through discussion and debate. These are important conditions for jointly activating the process of moving forward on the road toward annulling the contract.

Our hope is to move forward on a solid foundation of knowledge, inspiration and courage toward a more egalitarian society.

MoS01:3 Resistance and Ambivalence The Role of Men in Gender Equality Policy Implementation.

Ingrid Pincus Swedish Association of Health Professionals

In Sweden one of the cornerstones of government gender equality policy is, and has been for the past twenty-five years, to increase equality between women and men in working life. Yet despite government policy, the Equal Opportunities Act, and other initiatives sex segregation and inequalities with regard to pay, working conditions, the power structure, etc. remain. The gap between policy goals and their realization is to a large extent the result of difficulties encountered in local organizations, public as well as private, charged with putting this policy into operation. Feminist research of gender equality implementation in local government has pointed to a number of factors inhibiting change. Among these is the problem posed by those responsible for implementing government policy namely: men in upper level positions in these organizations. It is this problem that will be discussed at the seminar. Two questions will be addressed. 1) How do men

in upper level political and administrative positions prevent or support gender equality policy work in municipal organizations? 2) Why is it that most men in leadership positions act in ways that prevent the realization of this policy when they say that they are against the discrimination of women and in favour of equality?

MoS01:5 HIV/AIDS among Zambian Nurses

Per Godtland Kristensen, Norwegian Nurses Association

This presentation highlights issues related to HIV/AIDS among nurses in Zambia. Zambia, a land-locked country in Sub-Saharan Africa, is a country which is hardly hit by the AIDS pandemic. Around 20 % of people between the ages of 15 and 49 are infected.

Nurses and midwives in Zambia total approximately 12,000 individuals, representing the majority of health sector personnel. 98 % of them are women. There are no specific statistics on HIV prevalence among Zambian nurses, but there is reason to believe that nurses are no less affected than other population groups. It is assumed that three out of four deaths among nurses in working age are AIDS-related.

The growing number of deaths and sickleaves among nurses has caused alarm. The Zambia Nurses Association, assisted by the Norwegian Nurses Association and NORAD (Norwegian Agency for Development Cooperation), conducted a survey among 354 health sector personnel in four provinces of Zambia in 2001, the majority of respondents being nurses and midwives.

This presentation highlights major findings from this study, focusing on risk factors in the workplace, level of education and training, treatment, care and support for those already infected, voluntary councelling and testing and impact on patient care. Findings suggest that nurses and midwives are exposed to risk of infection both at the workplace and in their social life. There is lack of guidelines on infection control as well as protective clothing. This situation often makes nurses believe they are more exposed at work than in social life.

It is assumed that nurses in other developing countries, particularly in Sub-Saharan Africa, may find themselves in a similar situation.

Nurses are vulnerable because they are women and because they face an occupational risk of being infected. A six years' project has been planned to empower Zambian nurses to reduce risk factors and improve daily life for those already infected.

MoS01:6 Workplace Violence in the Health Sector ILO/ICN/WHO/PSI

Mireille Kingma, ICN

Staff in the services sector are sixteen times more likely to be victims of workplace violence. In Sweden, 24% of reported cases of violence at work involve the health care sector – much higher than any other sector taken in isolation, e.g. retail trade employees (4%), the police (5%), education (7%), transport (7%) or banking (7%). Research internationally has confirmed that within the health sector, nurses (the majority being female) are as much as three times more likely to be victims of violence than other categories of health personnel. Workplace violence in the health sector is increasingly recognised as a major occupational health hazard.

Data on the incidence of workplace violence in the health sector have recently been collected in industrialized countries. Preventive strategies and early intervention are becoming recognised as the most effective way to contain and diffuse violence at work. Their application however is far from universal. Reactive responses, based on the use of fear and counter aggression, still prevail. In many countries, workplace violence is still ignored and/or neglected.

The provision of health care to the general public and workers (e.g. occupational health services) is greatly influenced by the work environment of nurses. Workplace violence needs to be addressed as a threat to workers' dignity but also to the quality of health services available to a population in need. ICN has put in place a multi-prong strategy to disseminate information on the incidence of workplace violence, the impact of this violence and a range of effective prevention measures.

Jointly, the International Labour Organisation, the International Council of Nurses, the World Health Organisation and Public Services International initiated a project in 2000 in order to support the development of sound policies and practical approaches for the elimination of workplace violence in the health sector. By May 2002, the following project activities will have been completed:

- An initial background paper summarizing the data presently available and identifying gaps in information that need to be addressed.
- An international qualitative and quantitative research study undertaken in main capitals of Europe, Africa, Latin America, Asia and the Middle East to strengthen the knowledge base on incidence, contributing factors, existing responses and prevention measures.
- Desk studies comparing existing government violence reduction guidelines, the link between stress and violence, and the management of victims.

A round table of experts to review the data and develop effective anti-violence guidelines.

This presentation will discuss identified significant trends, present the research conclusions and highlight the major approaches recommended to address workplace violence in the health sector.

MoS02: Women at the workplace

Chair: Ulla-Britt Fräjdin-Hellqvist

Organiser: Confederation of Swedish Enteprise

MoS02:1 The Glassceiling, does it exist?

Anita Beijer Volvo Car Corporation

More than half of the population is women, but often we are talked about as a minority. And of course this is true if you talk about "formal" managers. How come that we with all our diverse experiences have so much difficulties to become "big bosses". Is it due to that there is a glassceiling? Sometimes it is thin and rarely break when we hit it. We feel the bits and peaces hitting on body and sometimes they also give some wounds. The ceiling could be made of rubber glass might be also armed. The rubber makes it flexible so we don't feel it when we hit it. In those cases we deny that a ceiling exists and that we never have had any difficulties or been treated differently. I believe it is important to talk about this so we are better mentally prepared and can support each other and share our experiences.

MoS02:2 Is Working "9 To 5" a thing of the Past?

Andris Kreicbergs Time Care Ltd

Over the last 50 years, access to education and labour market has profoundly changed the life of women in industrialised countries. Given the traditional role as caretakers of children and home, the increased professionalism has created a strenuous situation for many women. This will probably not be fundamentally changed unless men become willing to take on more home responsibilities. Yet, other means of facilitating the dual role of women may be considered. One option is to change the prevailing rules of work time. Notably, work times has been recognised as one of the key factors for production and well fare over the last years so as to become a hot topic on the political agenda. Current debate about work time appears to deal with two main issues, i.e. length and allocation.

In times of stiffening competition there is an increasing demand for production flexibility, while simultaneously there are recent reports on an increasing incidence of burn out syndromes and long-term sick leaves. The escalating conflict between demands on production efficiency and well being of the employees has generated a wide variety of proposals. A shortening of work time is advocated by unions and certain political parties, while employers demand more flexible work time rules. This has prompted the development of new shift systems aimed at complying with shorter work time, while also trying to "streamline" staffing according to load. However, few attempts have been made to consider individual preferences of work time.

Today Time Care is the only system, which operates without preset shifts, and therefore is capable of combining in a true sense production flexibility and individual preferences of working hours. By abandoning preset shifts and introducing instead a framework of operating hours defined by the employers, within which individual choice of working hours is permitted, the balance private work life is significantly improved. The flexibility of Time Care permits the employees to choose length and allocation of work hours for any given day of the year. This, obviously, facilitates the organisation of private life, eg. child care, dentist appointments, courses, hobbies, sports activities etc. It also enables a better adaptation between the work schedule of husband and wife. Ultimately, these circumstances also affect working conditions so as to reduce stress, burn out and sick-leave so as to improve productivity. In the Swedish Post, personnel costs could be reduced by more than 10 % after the introduction of Time Care. At the emergency unit of Falun Hospital productivity increased by 7.3 % most of which could be explained by less staff turnover, absenteeism and overtime. If increased productivity around 2-3 % could be accomplished for 10 % of the employees in EU, it would represent a gain in the range of hundred of billions Euro.

New work organisations, which can offer both higher productivity and improved working conditions, are urgently needed. In the near future, public demands on service, in particular within the health sector, will increase. The next decade described as a demographic bomb because of increased longevity will pose a tremendous burden on health care requiring substantial expansion of this sector. Already now, there is a significant problem in recruiting and retaining health staff, e.g. nurses, across Europe. This situation will become even worse and close to impossible to manage, unless efficiency and working conditions are substantially improved. Apart from higher salaries, flexible staffing and individual freedom of choice will become increasingly important.

Although, the Time Care system has been widely accepted in Sweden, there are reasons to believe that the willingness to adopt new concepts varies according to prevailing culture and traditions for work organisation in different countries. Anticipated difficulties in introducing the concept pertain to hierarchy and doubts about self-rostering. Can employees be expected to take over the responsibility of staffing, albeit within a framework defined by the employers? The fears and obstacles may be overcome by convincing the employers that the only way of achieving truly flexible production is to abandon shift concepts and convert to hour based solutions. However, acceptance of more flexible production can only be obtained from employees and their unions by increasing the individual influence over work time. A solution, which offers production flexibility for the employer and increased individual freedom of choice for the employee, will undoubtedly have a significant impact on production and work life so as to reduce the antagonism between the parties of the labour market. However, the ultimate key to lifting off the burden from a woman in executing her dual role is a man willing to adopt also in his profession the concept described.

MoS02:3 Women in Charge!

Camille Forslund Keyline AB

In Sweden many companies currently work systematically to improve the working environment. They strive to include all their employees in the development of the company and its products and services. It started with quality groups in the late 80 s and early 90 s. The focus then was on product quality. Nowadays it's more about leadership and work organisation.

Part of good leadership is including employees in matters that effect the company and getting their input on how to improve products and services, environmental awareness, work organisation and skills. It also entails attempting to achieve consensus. Simply discussing them can solve great many problems. Women are usually good at this. But good leadership is also about leading employees, making tough decisions, focusing on the prosperity of the company, whether it's a solo firm or a multinational. This is a task women often find harder to perform than men. Most women are brought up to be good mothers and sisters, to take care of others, while most men are brought up to be head of the family, the soccer-team, the group.

What is good leadership? What makes a woman a good businessman and leader? What makes a company a good place to work for both men and women? What special qualities can women bring to management? What are their greatest hurdles? How do you help women become leaders and still remain themselves? How do you create companies that function well with both women and men at the top? An attempt to answer these questions will be made during this presentation.

MoS03: Women's Working Conditions and Health

Chair: Elisabeth Lagerlöf

MOS03:1 ICOH Network on Women, Work and Health

Elisabeth Lagerlöf

European Foundation for the Improvement of Living and Working Conditions

In the year 2000 the International Congress on Occupational Health (ICOH) set up a network for women, work and health. The aim of the network is to facilitate information exchange and collaboration in the field of gender research on occupational safety and health. Specific objectives would include the following:

• To create a connecting point for professional managing of and conducting gender based research and prevention strategies on occupational

safety and health, working conditions and equal opportunities

- To create a homepage on the web, which includes newsletter, report announcements, seminars, meetings, events and work in progress
- To stimulate exchange of information about gender research methodology and explore the possibilities to set up a database available on the

internet about research on women, work and health.

• To stimulate gender impact analysis on health and safety regulation, guidelines and exposure limit values, on occupational compensation

systems as well as on labour and social policies.

• To cooperated with other national and international institutions and ICOH work group in interested in addressing the occupational health and safety gender issues.

The Third International Congress on Women Work and Health is the first opportunity for this network to meet, and the workshop will give a short overview of the present accomplishments of the network as well as presenting some problems of growing importance for women's work and

health. The presentations will then be followed by a discussion about the future of the network and how to further the intentions of the network.

Anyone interested in these issues are welcome to the symposia.

MOS03:2 Work-Related Musculoskeletal Disorders: Is there a Gender Differential, and if so, What does it Mean?

Laura Punnett and Robin Herbert

Department of Work Environment, University of Massachusetts Lowell, and Department of Community and Preventive Medicine, Mount Sinai School of Medicine

Musculoskeletal disorders (MSDs) include a variety of conditions affecting the muscles, tendons, ligaments, joint cartilage, and peripheral nervous system. They occur widely in the general population and most often affect the back and upper extremities. Rates are elevated in many occupations characterized by exposure to ergonomic stressors such as rapid and repetitive motions, forceful exertions, non-neutral body postures, and vibration. MSDs are more prevalent in women in the general population; however, a large proportion of the gender difference appears to be attributable to differences in ergonomic exposures in the jobs held by men and women. The data are inconsistent as to whether rates in women are higher after adjusting for occupational ergonomic exposures. Some studies suggest that men experience more MSDs than women when exposed to similar levels of physical ergonomic stressors, although women may have a higher background risk; women may also be more likely than men to leave work due to work-related MSDs. Factors relevant to gender differences may include psychosocial strain at work, household work, pain reporting and health care seeking behavior, body size and strength, tendon and muscle composition, and effects of circulating endocrine hormones; none of these has been investigated adequately, especially with respect to possible interaction with occupational ergonomic exposures. The predictors of MSD outcomes such as disability, economic losses, and social and family burden have also been little studied among women.

MOS03:3 Collection and review of existing information on women's safety and health at Work

Sarah Copsey

European Agency for Safety and Health at Work

Presentation in the ICOH workshop: Women, Work and Health

Two key areas of activity for the Agency are information exchange and networking. Within its 2002 work programme the Agency has started a project to collect and review information on the occupational safety and health of women. A report will cover: what is known about about occupational safety and health risks to women and the corresponding health outcomes; what gaps there are in knowledge and what conclusions aboput improving the occupational safety and health of women can be drawn. In parallel to this the Agency is setting up on its website a feature providing links to sources of information, reports etc. on other websites about occupational safety and health and women/gender. The aim of this web feature is to help access to the information and sharing of information. Current progress on the review and the website will be presented.

MoS04: Transcending Boundaries – interactive Research as a potential

Chair: Eva Gunnarsson, Co-Chair: Hanna Westberg

MoS04:1 Transcending Boundaries – interactive research as potential for improvement and change

The focus of this symposium is to discuss and problematise potentials and dilemmas when an interactive research perspective is used as a method of creating new knowledge in everyday working life. We are also trying to answer the question: What do we gain from this interactive research as a perspective and method in comparison to traditional research?

Five different 'cases', with empirical work from very different fields, embodying the idea of an interactive research process where 'practitioners' and researchers are working together will be used as a base for the discussions. The different cases are also using a variety of methods such as; participatory observations, 'interactive' knowledge seminars, diaries, research circles and interviews. The wide empirical fieldwork involves work done in Africa, India and Sweden on different levels as well as on several fields like:

- 1. Integrating a gender perspective in the area of Equal Opportunities in the so called Employment Guidelines (being part of the The National Plan for Employment, NAP). In this case three policy areas are targeted, the gender gap in employment, reconciling professional and family life, and facilitating the re-entry into the labour market.
- 2. The equity policy of the South African Broadcasting Corporation who have been favorable to black women journalists. The case is discussed in relation to the context of how people and especially black women are coping with change.
- 3. The feminisation of women's (re)productive work in the unorganised production system in India and suggests recommendations for development of strategies aimed at the promotion and empowerment of the workers in coastal Orissa.
- 4. In the field of social care where a new organisational model is used as a 'questioned' means to open up for areas for learning- and development processes that promote the development of moral and ethic competence.
- 5. Describing and analysing different forms of knowledge, skills and qualifications in relation to the claims adjusters' work being part of a larger development programme on Comparable Woth and Equal Pay. Interactive knowledge seminars with practitioners and researchers are used to create new knowledge in the field of skills and qualifications

MoS04:2 Transcending traditional boundaries with interactive knowledge seminars and research circles focusing skills and qualifications in the claims adjusters profession

Ewa Gunnarsson

Arbetslivsinstitutet, Stockholm

Skills and qualifications in the claims adjusters work were made visible and partly reformulated in this development project being part of a larger development programme on Comparable Worth and Equal Pay. The project was running for three years. 'Interactive knowledge seminars' with practitioners and researchers from different disciplines intertwined with two research circles, one for the female claims adjusters and one for the male claims adjusters, were used as methods to create new knowledge in the field of skills and qualifications. The new knowledge was then used as a base for designing a tailored gender neutral job evaluation system in the company. The project was followed by an advisory committee and a reference committee composed of members influencing the wage setting process in the company. These members were also invited to partly join the interactive knowledge seminars. In this way the project could be seen as a disseminated learning process for the company. One important result from this project was the conceptualising of social skills and emotion work in a new more elaborated way and as a consequence a strengthened emphasise on these skills and qualification in the new wage system. In this sense the project could be seen as an empowerment tool for skills and qualifications in a highly qualified female dominated profession and as such interesting also on a more general level.

MoS04:3 Participatory and Interactive Research as a Method of Creating new Knowledge in the Field of Social Care

Marianne Westring Nordh National Institute for Working Life Söderhamn

Social care in Sweden consists of elderly care, care for people who have physical and mental handicap and mentally retarded care. Social care has in later years gone through big changes. These changes mean new challenges for municipal organisations, such as social care.

The paper will describe how one organisation project called "Arbetstidsmodellen" has turned out in one social care organisation. In this area do the organisation have the responsibility for the housing possibilities for these groups mentioned above.

The aim of the project is to research and problematise wehther a new organisational model is opening up areas for learning- and development processes that promote the development of time, ethic and moral competence. How can changes in organizational design contribute to working conditions for the workers and living conditions for the clients? What kind of possibilities and what kind of difficulties can arise?

The method is based upon everyone's participation in a democratic dialogue. All the participants (members from the different groups and the researcher) are there on equal terms. Dialouge/research

– circles, participatory observations, diaries and interviues are the qualitative methods that will be used to create new mutual knewledge in these areas.

Keywords; municipal organisation, social care, moral competion, ethics, time, gender and participation.

MoS04:4 Equity Policy of the South African Broadcasting Corporation

Crystal Orderson

Cape Town, South Africa

This research essay will be looking at the equity policy of the South African Broadcasting Corporation, SABC and whether it has been favorable to black women journalists. My argument is that "an increase in numbers of women in the SABC and specifically the News Department, represents a necessary but not sufficient change condition to ensure that the equity policy will result in substantive change for women.

I however believe seven years after South Africa's transformation project started, it is time to critically reflect and "making sense of the media, gender and the SABC".

The South African Broadcsting Corpation, SABC, is a public broadcasting service whose functions include the dissemination of information, educational programmes and entertainment to the South African public (SABC 1995). It is therefore clear that the SABC acknowledges and recognises the role it plays in the South African context in providing information to the public. Additionally, the SABC in its vision and mission acknowledges that the skewed and unbalanced staff composition is linked to the historical legacy of apartheid.

The study is also a personal inquiry, in trying to make sense of myself as a black woman journalist in South Africa. The study does not wish to only critically examine SABC's policies in terms of gender equity, but more importantly it is trying to critically engage with the media, as well as understanding what is taking place firstly in the media, African women in the media and the SABC.

It is however important to note that what is happening at the SABC must be seen in the context of how people and especially black women are coping with change, seven years after the historic 1994 elections. I would argue that there has been little done to make sense of women in the media and how change strategies have affected them

Media scholars argue that the result of so few women in leadership positions in the media is that there is a lack of strong voice on how gender issues should and must be portrayed in the media and what issues should be reported. In a 1996 study conducted by Margaret Gallagher, women appeared in just 19% of all news stories in ten African countries. When women do appear in the news, they are most often portrayed as victims of violence or as physical objects and rarely as experts, resources or leaders.

I will firstly give an overview of the mass media in both Sub-Saharan Africa and then specifically South Africa. I will draw on insight from African media scholars. I also embarked on semi-structured interviews. Undertaking this meant that the design of the questions was redefined throughout the interviewing process.

Although my research focussed was specifically at the newsroom, its is however an integral part of the SABC, and therefore this research straddles broader SABC issues and the newsroom.

Although I tried to focus on the newsroom, it was difficult as it forms part of the SABC and policies. I would however argue that although one cannot say that what takes place in the newsroom per say is similar to the rest of the SABC it provides some insight into the organisation.

MoS04:5 Use of interactive Processes in integrating a gender perspective in everyday working life

Hanna Westberg ALI Stockholm

The horizontal and vertical gender segregation in the Labour market in Sweden is well known. Women and men generally do not work in the same professions and men are found in the upper hierarchical levels much more than women. Women are to a great extent employed in traditional areas like health care, services and office work. The education is also gender -segregated.

The National Plans for employment (NAP) following the Council Decision on the 1998 guidelines, member states of EU had to put forward their NAP for employment to the Commission in April 1998. In October the Commission published a joint employment report analysing the implementation of the NAPs. The aim was to pursue employment objectives in a coherent and balanced way. The Commission's Expert-group of gender and employment evaluated the 15 member states National Employment Plans for 1998 from a gender perspective. The report stated that although the mainstreaming of gender equality across all areas of employment policy was recognised in several NAPs it still failed to materialise in concrete goals and initiatives. The guidelines for 1999 proposed by the Commission – strengthened egual opportunities policies for women and men. The Comission constituted four main areas, four pillars: Employability, Entrepreneurship, Adaptibility and Equal Opportunities. Under the fourth pillar, the Employment Guidelines target three policy areas:

- the gender gap in employment
- reconciling professional and family life
- facilitating the re-entry into the labour market.

The overall aim of this project is to integrate a gender perspective in everyday working life in order to create an innovative model which will improve the conditions in all three policy areas mentioned.

Networking, dialogue, process and reflection are the main theme of the project.

We have started to develop a model in creating and establishing regional and transregional networking-sessions where we begin a dialouge on "How to work with and develop know-how" within the question of Equal Opportunities.

MoS04:6 Towards increased Equality? Traditional -Craft Women's Work and Health in Coastals Orissa India

Jyotirmayee Acharya

Norwegian University of Science and Technology, Trondheim, NorwayT

One of India's global as well as local advantages is cheap female labour. However, while the protection of production is emphasised the protection of producers including the health dimension

of work is seldom stressed. The implementation of structural adjustment programs and new economic policies tend to increase women's involvement both in domestic and labour market work, often resulting in an intensification of their work in precarious conditions with multiple responsibilities (Shah et.el 1999, Banerjee 1999, Lund et.al., 2001, Floro, 1995, Beneria 2001). Importantly, women's participation in the informal home based traditional crafts are also far remote from the implementation of ILO standards regarding women's health at work. In addition, Ninth-Five-Year Plan (1997-2002), of India which emphasised women's health and empowerment are the subject to a great deal of critical scrutiny.

This paper is a contribution to the ongoing debate on the effects of the feminisation of women's (re) productive work in the unorganised production system. The paper attempts to link the gender inequalities under the changing social and economic conditions and analyse the situation of women to give recommendations for development of strategies aimed at the promotion and empowerment of the workers in coastal Orissa and elsewhere in India. The approaches used are adoption of multiple methods across levels and structures in order to explore various dimensions of women's multiple identities and roles as to reflect workers' coping capability.

This debate of feminisation of work may be linked to increasing gender inequality and more specifically wage inequality as well as gender segregation at the work place and related health hazard due to women's participation in the informal sector. In this perspective the study reflects how the situation of the various dimensions historically depends on the existing dominating forms of power structures and its changing meaning over time and space.

The degree of autonomy women in India enjoy is most deprived by the traditions of patriarchy which exhibits a tension between a desire to exploit and an obligation to protect (Bhasin 1994, Banerjee 1998). Gender inequality at the work place and at home is a social division of equality. The argument then is that the tendency to undercount and undervalue women's paid and unpaid labour and related health status is to a significant extent the result of gender unequal power practices, prejudices and discriminations on the part of their employers, intermediary institutions (state), fellow workers at the same time their households.

Existing social and economic norms determine 'permission' to seek health care and 'ability' of women for food allocation and paid work. It is also evident that though the number of women needing work goes up, they will most probably be disadvantaged by their limited mobility, poor quality marketable skills, vocational education, property rights, access to credit and public information systems. Furthermore, the outcome of the new labour market trends may thus end up with increasing insecure livelihood despite long working hours, gender based deprivation and depression and socio-spatial inequality operating to undermine women's health, resulting in high levels of morbidity and mortality - an experience of escalating disempowerment.

In the final section of the paper I will use the concept of women's empowerment to structure the analysis and to present some alternative perspectives. At policy level, planning efforts should be directed towards maximising the transformative potential of self help groups, local women's organisations and employers to ensure that they are responsible enough to the ILO agreements and new forms of social protections such as India's women's unions e.g. Self Employed Women's Association (SEWA). On the other hand, local women should organise enough to absolve opportunities to improve their quality of life and lay the basis for empowering them towards transformation of the structures of their subordination.

MoS04:7 When work conditions in late modernity challenge methodological ideals

Christina Hee Pedersen

Roskilde University, Denmark

The overall objective of this ongoing research project is to provide new knowledge about meanings of gender in Danish development co-operation agencies, both NGO, private sector and state. Despite many years of attempts to incorporate gender as a crosscutting issue in Danish international development co-operation, the implementation has encountered numerous problems. This project will contribute with new and detailed knowledge about how social and individual processes at the organisational level in the North constitute a relevant source of knowledge to be able to explain these problems. The organisational culture is understood as a pattern of actions and symbolic relations and meanings which are maintained and changed through a continued interaction and communication process. Behavioural patterns and symbolic discourses have to be interpreted to be understood. To be able to interpret an organisational culture a focus is put on how actions and experiences become meaningful for the involved parties.

The project has been motivated by a desire to reduce the existing distance and relative autonomy between the spheres of practice and academic research, a distance that makes it difficult for both the research and the practical field to learn from existing knowledge. The project attempts to contribute to soften this relation through its dialogical methodology. Knowledge is being accumulated and challenged continuously throughout the project period in direct dialogue with the practitioners in the field. The research is driven forward by a feminist change perspective and reaches beyond a limited academic sphere.

The project belongs to the category of action research where methods and theory are develop in the process with the research area and includes a clear change perspective. It is founded on a strategy for continuous communication, dialogue and exchange of experiences between the researchers and the "researched". The project develops in dialogue with the field actors and we will continuously communicate observations and hypotheses and analysis to a selected dialogue group that is meeting one whole workday every half year, during the research. Furthermore experience from practitioners in Holland and England has been collected and is being used a set off for discussion among members of organisations in Denmark.

Both the feminist change perspective and the overall ideals of action research are being challenged in this project because of the existing working conditions and norms within the field. We have found a number of "burn outs" of personnel, continuous travel activities and discontinuity and mobility within staff in Danish Development Corporation. Also the lack of space for social and professional interaction and reflection is being mentioned as a change in organisational life that affect gender relations and the overall health situation.

In my paper I would like to describe the innovative, very participatory methodological approaches I have used in the collection of data, but also discuss the shortcomings of such action research approaches in the everyday organisational dynamics of modern gendered organisations.

MoS05: Women and Development

MoS05:1 What Hope for Women

Peter Etebe International youth awareness Foundation, Cameroon

A central analysis on the collapse of the former Soviet and the end of the cold war detected toward a New World that is a new global, order. With globalisation as the watch word yet not every country find itself comfortable on the globalisation train due to poverty.

Focus on the World Bank reports 90% of the population of less developed countries, which Cameroon is one find itself on agriculture. Living mostly in rural areas and therefore women constitute a bulk of the population they are highly affected.

The resolution of the Beijing conference of 1990 should also be as a point of focus on the future of women.

MoS05:2 Government Commitment

Peter Etebe

International youth awareness Foundation, Cameroon

The manner this issue is to be regarded. Focus is laid on the contribution of women in the development process has for quite sometime been in the center of discussion.

This include the reason for creating the Ministry of Women Affairs whose priority as remarked by Madam Catherine Bakang Mbock is to empower as well as upgrade their role as guardians of values, tradition and economic agents.

Focus will be on the insignificant nature of women works activities before the early 1990s; especially since women were known for provocation and for the family care activities, rather than stymatise them. For instance the publication of the 1999 on the national statistical reference guard present the socio-economic situation of women in Cameroon is as follows. Of the 45 members of government only 3 are women. In parliament of 180 members, only 10 are women, of 9932 municipal councillors only 14 are women. no women occupies the post of governor, senior Divisional Officers or even Sub Prefect.

Taking cognisance of the above fact, special emphasis should be taken of the following points:

The sensitisation on the notion of traditional beliefs and religious beliefs of women.

To create a network of women association to examine the situation of women.

MoS05:3 Women Emancipation

Imbolo Mbua

International Youth Awareness Foundation Cameroon

On this issue it shall be examine how the 21" century came toward the women in advancement, toward the world globalisation to champion what they usually regards inferior before the 3rd millennium.

Focus will be made on the following:

The resolution taken at the millennium summit by the world leaders as decreed.

By half the year 2015 the proportion of the world's poorest countries, and to bridge the gap between the developed and the less developed countries.

- Reduce by 25% the rate of HIV/AIDS infection in 15- 24 years old by 2005 in the most affected countries and by 25% worldwide by 2010.
- Increase prevention and awareness among the population most at risk by improving access to information.
- To increase research into other health problem such as malaria, Pneumonia, tuberculosis that affected about 90% of the population.

To conclude therefore women will have to look for immediate solutions to the improve the standard and the deplorable situation in the rural areas, that is the less develop and less privileged women.

MoS05:4 The Informal Contribution of Women in Over-coming the economic Crisis.

Diamond Norby Ebs,

International Youth Awareness Foundation Cameroon

The paper will be structured in the activities of women and focus will begin with an introduction of the significance of this period-1980 to the present date in the lives of Cameroonians.

Will examine how women are engaged in some gainful activities in the informal sector taking into consideration their age and status in relation to the various activities, they indulge in.

An attempt will also be made to highlight the reasons why women engage mostly in economic activities i.e of the informal sector.

MoS05:5 Women Breaking the Barriers

Peter Etebe

International Youth Awareness Foundation Cameroon

The title "Women Breaking the Barriers" will highlight the role of women as an agents and activist for change., enumerating the general problems of women and the general aims of women's associations (activist groups 1990s). The section will also dwell on the strategies adopted to bring change such as individual efforts. Through feminist groups and N.G.O's. Consideration will also include the indications of women groups i.e. their regional, national and occupational character.

Some practical examples of feminant groups and N.G.0.'s will also be examined (their items and achievement and composition). This sub theme will be included by a brief illustration of Government's efforts to assist women break barriers.

MoP01: Politics, Legal Systems and Economic Aspects of Women, Work and Health

MoP01:1 Predictive factors for disability pension – an 11 year follow up of young persons long-term sick-listed due to neck-, shoulder- or back pain

Karin Borg Linköping University

Although back diagnoses are a major public-health problem, the main diagnosis behind sickness absence and disability pension and also often are recurrent surprisingly few longitudinal studies have been performed.

Objectives: To identify predictive factors for disability pension among young persons initially sick-listed with back diagnoses.

Methods: An 11-year prospective cohort study was conducted, including all individuals in a Swedish city who, in 1985, were aged 25-34 and sick-listed ³28 days with neck, shoulder, or back diagnoses (n=213). The following data was obtained: disability pension, emigration, and death for 1985-96, sickness absence for 1982-96 and demographics in 1985 regarding Sex, income, occupation, marital status, diagnosis, socio-economic group and citizenship. Cox regression with and without an extended time dependent variable was used in the analyses. Having a sick-leave spell exceeding 90 days during the two pas years were used as time dependent variables with a time period of two years.

Results: In 1996, i.e. within 11 years, 26% of the women and 14% of the men had been granted disability pension. This relative risk for disability pension was higher for women (2.4; p=0,010), persons with foreign citizenship (3.6; p=0.009) and those who had had >14 sick-leave days per spell during the three years before inclusion, compared to those with <7 days/spell (3,1p=0.003). The higher risk for women and persons with a foreign citizenship decreased but remained when applying the model with a time dependent variable, adjusting for sickness absence during the follow up. Women then had a relative risk of 1.9 (p=0.049) compared to men for being granted disability pension. Foreigners had a 2.6 times higher risk compared to Swedes (p=0.048).

Conclusions: This cohort of young persons proved to be a high-risk group for disability pension. Many studies have earlier found a gender difference in the risk of being granted disability pension. This study shows that the gender difference remains also when regarding the sick leave during the follow up period.

MoP01:2 New perspectives for the protection of women's health at work in Italy

Maria Castrictta

ISPESL - Department of Documentation, Information and Education, Rome, Italy

The authors' aim is to illustrate the various steps of the Italian legislation for the protection of women's health at work, issued during the last decades, pointing out the main passages which have led to the regulation now in force and designing the new trends.

The protection of maternity represents a significant achievement as regards women's health at workplace. The European Directive 92/85 is the reference legislation concerning the basic measures of women's health and safety during and after pregnancy all over EU countries. But the national regulations, sometimes, can be said to anticipate the content of EU Directives. In fact the Italian law 1204, dated 1971, deals with the workers- mothers ' protection and can be considered the starting point for the next new amendments and decrees covering the same items.

Italian legislation from the seventies to nowadays has, of course, improved women's life at work but the changing world of work led to face new aspects and problems as well, demanding for more and more efficacious actions and new solutions, especially as health is concerned, both at legislative and social-political level.

Tumors, musculoskeletal disorders, osteoporosis and psychosocial factors, seriously affecting women's health at work, will be focused and analysed as crucial intervention areas, giving an overview of the existing research, studies and legislation and stimulating new reflections for future.

MoP01:3 The Participation of Post-Soviet Women in the Political Life

Tatiana Sazonova, Valentina Bondarovska Kyiv National State University, International Humanitarian Center "ROZRADA", Kyiv, Ukraine

At the time of soviet regime the women's participation in social and political life it was strongly regulated by Communist party and State. Woman could not to be responsible for her own political career. If she planed to work as politician the first she should to be a member of Communist party. On the other hand, all norms of women participation in the Parliament or other political structure were defined in the Communist party Committee. For example, the candidate must be a woman under 23, not married, an engineer, with mother and father workers, etc. Gender equality was manifested but never being democratically realized. So at the time of transition and moving to the democracy women should to create the new political and social behavior models.

The aim of our research was to study the program of the main political parties of Ukraine in the context of the women's rights, gender equality, work and family balance, women participation in the political life.

Methods. We used method of V.Petrenko studying of psychosemantic space of political parties. We analyzed the 21 Ukrainian political parties, created a questionnaire and asked 350 respondents.

Results. We received data of the factor analysis of questioning results. The main factors for political parties programs are the problem of Ukraine relationships with European Union, NATO, Russia, etc.(24%) and the very insignificant factors are: women problems and gender equality (2%), human needs (2%). Interesting that 54% of voters in Ukraine are women.

Conclusion. It is very important to develop new psychological models of women participation in political life, their work in the political structure and to change consciousness of women and men on the all levels of social life in post-totalitarian society.

MoP01:5 Hospital Care Provided to Undocumented Immigrant Women without Insurance

Kris Siddharthan University of South Florida Tampa, Florida

More than two million undocumented aliens reside in the United States at any time. Many of them are women. Because many of them work in menial labor they are not provided health insurance as a benefit by their employers. They are also not eligible for government assistance programs such as Medicaid that insure poor and pregnant women. They therefore do not seek prenatal care because it is inordinately expensive and present themselves at time of birth at local public hospitals in cities and counties. Because of the lack of funds public hospitals have to restrict the amount of care provided to those without insurance.

To study the effect of undocumented and poor immigrant status with health care delivery we collected data from a large county hospital in Miami in Florida. The 1995 data contained severity of illness (using the Case Mix Severely index) and resource use (measured by average length of stay, procedures, and/for diagnostic tests performed) of undocumented persons from Dade County, Florida in an inpertient setting. Compared with native born populations and those who with permanent residency status admitted to the same hospitals undocumented immigrants had a higher Case mix severity index but a lower adjusted average length of stay. Average length of stays for women in birthing was statistically significant (lower) than insured and poor women. Average length of stay for all women's service was also lower. We discuss the policy implications of this inequality in health care and its social implications.

MoP01:6 The Promotion of Gender Equality in the Workplace

Jenta Apwoyo Maima Jujema Enterprises, Nairobi, Kenya

This study aims at investigation the role Kenyan men can play in the promotion of gender equality in the workplace.

The research has the following objectives:

- 1. To show the various forms of discrimination that Kenya women face at the workplace
- 2. To demonstrate how men can help fight gender inequality
- 3. To recommend possible solutions to the problem of gender inequality in the work place.

The introductory chapter gives a background of the learning institutions and companies to be covered in the study.

The subsequent chapters deal with the research design and presentation of the findings. During the study the quantitative research design was used to collect data. Furthermore, the findings show that Kenyan women face discrimination in their various occupations due to cultural beliefs perpetuated by men.

The researcher recommends that Kenyan men should play a major role in the promotion of gender equality in the workplace.

Lastly, the study concludes that gender inequality in the workplace inhibits the social and economic empowerment of Kenyan women.

MoP01:7 Work load and life quality among night-shift female clinicians in Brazil.

Anadergh Barbosa-Branco Universidade De Brasilia

Objective: to ascertain the influence of work load on the life quality of female clinicians who work at night-shift schedules at public facilities of Health care in Brasilia.

Method: one hundred female clinicians of several medical specialties were interviewed using a structured questionnaire covering the following variables: age, marital status, number of siblings, level of satisfaction at work, marital satisfaction, time spent on night-shifts, work schedule, time spent in home duties and participation of partner/husband in such activities, other personal activities, absenteeism, health conditions, degree of attractiveness of work, interference family-work-family.

Results: mean of age was 35.4±9.1; 60% of interviewees were married or living in a stable partnership; 58% had at least one child, 59% do not get any help from their husbands/partners in their household duties. Sixty-one percent sleep 6-7 hours a day, and 76.5% of them get a moderate rest; 68% work the following day after night-shifts; 47% work more than 60 hours a day; 68% have worked on night-shifts schedules for more than two years; 70% do not exercise on regular basis; 90% refer that their work interfere negatively on their domestic lives; 99.8% were absent from their work in the last 6 months and 70% refer decrease in libido as a result of the work load.

Conclusion: Work load was considered excessive influencing negatively life quality, especially in the social and familial relationships. It generates role conflicts and increasing stress.

MoP02: Occupational Health and Safety, 1

MoP02:1 Organic Dust Monitoring in Textile Mills and Respiratory Health Effects

Rodicia Stanescu Dumitru Institute of Public Health Bucharest, Romania

Aim: This work assessed the occupational exposure to cotton jute and wool dust in correlation with respiratory health effects 9 symptoms and lung function variation) in five textile mills, in which 90% of the workers were women.

Methods: Environmental samples included the determination of total cotton, jute and wool dust level in working areas, the morphological analyses of fibres and particles, size distribution analysis of fibre and particle aerodynamic diameters, chemical composition analysis of inorganic particles in airborne dust samples, bacteria, fungi and endotoxin level.

To characterize organic dust we used a scanning electron microscope type Philips 515 Connected to an energy dispersive X-ray microanalysis system. Endotoxin was determined using Limulus lysate test. Bacteria and fungi were analysed using special growing medium.

We mention that the percentage of smoker workers were low.

Results and Discussion: Total dust concentration over passed the TLV at all investigated workplaces. Morphological analysis showed that cotton, jute and wool dust consists of fibres, particles and fragments of extremely varied size and shape. We established two morphological classes: fibres, which had, major axis/minor axis ration >03:1 and organic and inorganic particles which had, major axis/minor axis ration <03:1. Particle percent was much higher in comparison with fibre percent in all studied workplaces. Size distribution analyses of fibre aerodynamic diameters showed that 10-50% of fibres were respirable sized, having the aerodynamic diameter<10 µrn (depending on the type of workplace). The highest

Percent of respirable sized fibres was found in opening and carding operations in all studied textile mills, 8-15% of inorganic and organic particles were respirable sized, majority of the particles being thoracic sized.

Chemical composition analysis of inorganic particles in the samples collected in working area showed the presence of silicates, silica, light metal particles (consisting from calcium carbonated and calcium sulphate) and heavy metal particles (which contain iron oxides, siderite and particles with a perfectly spherical shape identified as steel residues produced by friction of textile machines; Theses spherical particles were identified during carding and combing processes) Also, in the case of carding and combing operations a number of particles contain Ni, Ti, Zn and Cu.

The degree of contamination with bacteria and fungi was greater in jute mills. Low endotoxin levels were found only in cotton mills. Respiratory symptoms were more frequent (p<0.05) among jute workers; they were more diminished in wool workers. The prevalence of byssinosis as defined by Shilling's criteria was 12.6 - 18% among cotton workers and no byssinosis in jute and wool workers. The association between exposure levels and across shift decrement in FEV1 was not significant, but a significant correlation was found between the decrease of FEV1 and the exposure period.

Conclusions: Our study shows the importance of the characteristics of textile dust (type of dust, bacterial contamination) in comparison with its concentration. We found a low prevalence of respiratory disorders in women workers exposed to wool dust.

We underline the fact that the respiratory pathology in women textile workers overlap to other women specific disorders; therefore, preventive measures should includes clinical and functional examinations conducted more carefully and frequently in women workers with a long period of exposure.

MoP02:2 You and your Sensory Environment - A Life long Learning Experience

Klari Varallyai

A.L.L Egonomic International, Campbell River, Canada

Sensory awareness of one's environment can be called a form of education or as frequently happens, due to decreased awareness (injury, occupational disease) a "re-education process. In the last 50 years before the millennium and for years to come, a greater number of women are working in a variety of jobs worldwide. While some may retire earlier than the age 65 – international statistics support that the percentage of women working earlier than age 20 – and later than age 65 is on the increase.

Therefore the chance of having some challenges to the senses – due to work environmental influences is also on the increase – the risk of developing some dysfunction to one of several of the basic sense are frequently brought about by an inadequate work place, tools, and equipment design, which is lacking of awareness of the specific anthropometric and anatomical and physiological differences between women and men.

In addition to this – some of the physical and chemical factors are also having negative influence over the sensory and eventually over the motor system of the female work force. This conference is a clear sign of the recognition of the women's unique needs as far as their Health and Wellness is in the work environment.

Sensory integration through the central nervous system – via the senses are paramount for both men and women to be able to function in the total environment safely and efficiently.

Touch - Skin-Tactile Systems and Communication Vision - Eyes-Visual Perception/Communication

Hearing - Ears-Auditory System

Taste - Mouth. Tongue -Olfactory and Communication

Smell - Nose- Olfactory System

Proprioception /Kinesthetic Sense – Muscles and Fascia, Ligaments. Joints – Vestibular and Tactile Systems

For optimum nervous system functions in man, its necessary for both to receive and to integrate for a use, a constant stream of stimuli from the outside world around us as well as from the body. Without both elements: man's ability to cope with the world diminishes. The important early detection of any sensory dysfunction are a must – equally important to be proactive to act on the findings so the woman who are in the workforce are given the necessary help to minimize further injury and learn to maximize their ability to relearn what is possible and prevents secondary problems from the loss of any of their senses. To integrate sensory stimuli efficiently we have to also heighten our awareness of the role of the various sensory stimulus from a point which guides our daily lives at home and at work. Learning about the function and dysfunction of our senses is a Life Long Learning Experience. The poster here represents this interesting and challenging journey – for all ages and genders.

MoP02:3 Respiratory Function in Textile Workers Processing Synthetic Fibers

Jadranka Mustajbegovic, Eugenija Zuskin, Miliga Katic Andrija Stampar Medical University of Zagreb

The study included 308 female workers employed in processing synthetic stockings and 160 controls. The mean age of the exposed workers was 38 years with the mean exposure of 16 years. Most workers did not smoke while 41% of smokers consumed about 10 cigarettes a day. The data on acute and chronic respiratory symptoms were taken from all workers. Ventilatory capacity was measured by recording maximum expiratory flow-volume (MEFV) curves with readings on forced vital capacity (FVC), one-second forced expiratory volume (FEV₁), and maximum expiratory flows at 50% and 25% (FEF₅₀, and FEF₂₅, respectively). Textile workers manifested a higher prevalence of chronic respiratory symptoms than did the controls, although the differences were statistically significant only for sinusitis, dyspnea, and nasal catarrh. Occupational asthma was found in 3 (0.9%) textile workers. The prevalence of acute symptoms in the exposed workers was particularly high during shift, especially with regard to dryness of the nose (53%), dryness of the throat (49%), headache (47%), cough (47%), and eye irritation (46%). Textile workers showed a significantly lower FEF₂₅ than predicted. Our study on textile workers indicates that inhalation of Synthetic fibre dust impair respiratory function.

MoP02:4 Prevalence and severity of back pain among technical-administrative workers, Santa Maria, Brazil

Vera LG Blank, N Blank, Federal University of Santa Catarina, Brazil MSL Vogt 1: Federal University of Santa Maria

Objective: To measure prevalence and severity of cervical and low-back pain, as well as of back pain (cervical and low-back), reported by technical-administrative personnel employed by the Federal University of Santa Maria, in relation to some individual and occupational characteristics.

Methods: A transversal descriptive study was conducted. The study population (n=429) was selected by a proportional probabilistic sample including personnel from higher, intermediate and auxiliary levels. Data were collected using self-answered questionnaires. Chi-square test was employed for association measure, considering as significant a p-value equal or less than 0.05.

Results: Univariate analysis showed women presenting more cervical, low-back pain, and back pain than men. Severe cervical and low-back pain was also more reported among women than among men. Younger individuals (24-36 years) presented more cervical pain and less cervical and low-back pain. The individuals engaged in the same activity for a long time reported less cervical and low back pain and less severe pain. Work performed in a seated position, dynamic physical work, and psychological loads were associated to the symptoms, whereas work on standing positions and cognitive loads were not. Home chores during leisure periods were strongly associated with severe pain. The lack of regular physical exercise and extra hours of professional activity presented an inverse association, i.e., people with severe back pain exercised less and performed less extra hours. Personal, emotional and physical effort, as well as inconvenient positions and environment were associated to the perception of the causes of pain.

Conclusions: The results suggest that some factors, such as double work shift (professional and domestic), the care of children and some psychological conditions may be related for the higher prevalence and severity of cervical and low-back pain among women.

MoW06: Gender Implications of Labour Market Demands and Skills Development

MoW06:1 How to Show Your Professional Skills and Competenceies in Health Care?

Kaija Saranto, Johanna l,animintakanen, Tuuta Kivinen University of Kuopio)

Background

There are some labour market demands which emphasise the need of life-long learning in nursing practice. Recent changes in health care reflect that especially nurses skill requirements have enlarged (Sonninen *et al* 2001) and employers are more eagerly looking for employees who are not keen on rigidly defined positions or roles (MeNlebol & MeGinnis 1999). The changes include eg. 1) Nursing practice is shilling from hospital based to home based care. This means that nurses must be able to work in different facilities. 2) In addition, traditional manual information bas changed to rapidly ongoing fragmented digital knowledge. This requires skills in computer literacy as well as knowledge management. 3) The origin of nursing is holistic and human. However, technical aspects of care have increased due to advances in medical and nursing science. Especially the implementation of information technology (TT) causes confusion among health care workers; who are mainly women (96 %) and their average age in Finland is 48 years. 4) In near future the amount of retiring nurses will be huge. This means that there is a great need to transfer tacit knowledge to new nurse generations. These demands challenge nurses to actively maintain and develop their skills and competencies, they have proper tools to address those and they learn to market their competencies.

Purpose of the paper

The aim of this paper Is to discuss on how women health care workers address their skills and competencies as well as professional development in information society by using digital portfolio. The main study question was "What is the content and structure of the portfolio and do the nurses accept digital portfolio as a tool for addressing their professional skills and competencies". A postal questionnaire was sent to nurses (N=683) in three different organisations; Social and health centre, Central hospital and University Hospital, The response rate was 57. The data were analysed by taking frequencies and cross tabulation. Preliminary results will be presented at the conference. In the presentation we will focus on the experiences and results of a three year development project carried out in these health care organisations.

MoW06:2 Contextual Influences on Equality and Women Perception in the Czech Republic

Monika Morgensternová, Lenka Sulová The Charles University, Prague

Background: The position of women in the work place is a very "hot" topic in the Central and Eastern Europe. Times change, the Czech Republic tries to enter the European Union but thinking of people in the transition economy changes very slowly. We would like to present our study, which was carried at the Charles University, Czech Republic.

Purpose: The study tried to examine the contextual influences on discrimination in recruitment in a new transition economy. The aim of this analysis was to reveal deeper causes and after-effects of economical and political changes on the recruitment and social perception of women in the workplace.

Procedure: To achieve this goal, both quantitative and qualitative analyses were used. Researchers questioned and interviewed HR managers and psychologists in companies and recruitment agencies in the Czech republic in 1998-2000. The questionnaire was based on quantitative and qualitative questions and was divided into three main sections. Section A explored hiring and recruitment mechanism, section B was designed to obtain actual social perception of women and sex stereotypes in the workplace and section C examined the change of traditional model of Czech family and dividing of sex roles.

Results: The select and reward mechanism changed as a result of the falling of the Iron curtain but however due to the previous experience with communism, the perception of women in the workplace has not been changed. The first cause consists in the traditional model of the Czech family (the man as the head and breadwinner of the family) and the second cause consists in strong masculinity of the Czech society.

Conclusion: The results of the research support the theory that there is significant discrimination in recruitment. This research showed that while women have attained higher educational levels, they have lower salaries than men do. The image of women is in accordance with strong masculinity profile of the Czech society and sex stereotypes.

Keywords: Sex discrimination, recruitment and transition economy

MoW06:4 Some Psychological Problems of Female Students related with Employability

Virve Siirak Tallinn Technical University, Estonia

The author is working in Tallinn Technical University in the Department of Working Environment of the Faculty of Economics and Business Administration. The author is teaching the Risk and Safety Sciences and Ergonomics to the students of the Faculties of Economics and Business Administration, Chemistry, Power Engineering and Information Technology.

Tallinn Technical University is established in 1918. During Soviet occupation it was renamed Tallinn Polytechnical Institute. Since 1991 it is Tallinn Technical University. From 1991 new

programmes are being introduced offering more flexibility and choice. For this purpose, the organizational structure was reorganized. Now in Tallinn Technical Universities are Faculties of Civil Engineering, Power Engineering, Humanities, Information Technology, Chemistry, Economics and Business Administration, Mathematics and Physics and Mechanical Engineering. Now university has ca 8000 students.

During Soviet time most of students were males. Only 25% of students were females. Now 60% of students are males and 40% females.

The aim of the study was finding out which is students attitude for working and establishing their family after the University.

Female students had the main problem that after the University they have difficulties to establish their family because of the employers often do not like if their employees will absent from work because of the maternity leave. Female students will be after the University in conflict situation-they must choose between two things: the work or the family life. They are afraid that because of this situation they can lost their suitable years for giving birth to their children.

MoW06:5 Gender inequality at work: an Italian public body case study

Gemma Casadei and M. Teresa Chironi ENEA - Italian National Organisation for New Technology, Energy and Environment

Professional carrier and financial position of the employees of the most of the public and private institutes are strictly related to the personal opinion of the manager staff. When the male system is the evaluator of the professional skill of the employees, only the males arrive on the top of carrier and have the right job opportunity. In this study we have compared female and male professional carrier and salary, on the 1st of March 1999 of the employees of ENEA (Italian National Organisation for New Technology, Energy and Environment, a non profit making public body), given to us by ENEA's CPO (Equal Opportunity Committee). Only objective parameters, seniority of service and academic qualification, were used. The statistic mode (= distribution value to which corresponds maximum frequency) as indicator. Furthermore, the results show that female population undergoes discrimination and inequality and these results can be mathematically evaluated. Furthermore, the share of male employees with advantaged carrier is four or six times higher than female's; female salary is also systematically lower. Sexual disparity has been caused by structural and discretionary elements. The structural elements, related to all of the employees, are included all of the contract events over time. The discretionary elements are related only to the women and comprehend the discretionary evaluation of the professional skill by the manager. Our study suggests that the evaluation criteria used by the male staff are strictly dependent of gender. We conclude that the man dominant global system always determine female sexual discrimination in carrier and salary. This is against the principle of Equal Opportunity, which takes advantage of the gender differences.

MoW06:6 Causes and Forms of Deleterious Work

Gisela Notz Friedrich-Ebert-Stiftung, Bonn, Germany

In my contribution I start from the assumption that scientists as well as practicians who deal with "deleterious work" see a close connection between work and health and that they assume that unfavorable working conditions can cause or at least contribute to damage to health. In Germany, on

most days of the year more than 35 million young people and adults spend the majority of their waking time at the workplace, or "at work". The first question that requires clarification is what work actually is. To this day, theories developed by industrial and occupational sociology—outside of women's research—for defining human work primarily make reference to work performed by (male) wage laborers in industry and administration. The objects and subjects of investigation, the employees and working people, and those affected and the protagonists are apparently "gender neutral". However, consideration of the causes and forms of deleterious work from a feminist point of view required examining work as a whole in its manifold paid and unpaid forms.

In a second step I want to inquire into what constitutes deleterious work in the various areas of work and in doing so include the results of my own studies on the compatibility of family and job as well as on women's "volunteer" work. Following this I will demonstrate the damaging influences at the workplace and go into the health risks associated with "women's workplaces", which continue to be widely underestimated. Although women now theoretically have access to almost all jobs, in the Federal Republic of Germany there are still many of the so-called "typically female jobs" as well as "typically male jobs". I intend to go into the burdens experienced almost exclusively by women, among which are sexual harassment at the workplace and the exclusion from socially organized work due to the one-sided assignment of domestic activity. Finally I will elaborate those controversial provisions of the *Arbeitsschutzrecht* (Law on Safety and Health at Work) that apply specifically to women and that often serve to restrict women's work, in particular if they are mothers or are pregnant.

In the final part of my presentation I will consider how an improved interrelation between health, the environment and those around us can be established, enabling a more favorable working culture for all areas of human work in the spirit of the WHO model "sustainable health for everyone". This cannot be achieved without a goal, that is an idea of what different, better, and more meaningful life work is.

MoW07: Politics, Legal Systems and Economic Aspects, Health related Issues

MoW07:1 Women, Health, and Higher Education

Ann Mari May University of Nebraska-Lincoln, Lincoln, USA

The importance of increased levels of education in improving the status of women throughout the world is well established. Higher levels of education are associated with lower birth rates, higher incomes, and greater autonomy for women. In the U.S. as well, education has played a significant role in improving the status of women, yet women's struggle to achieve equal access to higher education has been wrought with difficulties.

This paper examines the evolution of the role of women in higher education in the 19th and 20th centuries in the US. The paper focuses on gender stereotypes which used concern over women's health as a means of excluding as well as means of segregating women in particular occupations and educational areas and examines barriers to the break down of those gendered disciplines over time

With the rise of women's colleges in the early 19th century, women were segregated in their educational opportunities and prepared with curriculum thought to be suitable for women. But it was the rise of public universities in the 1850s, 1860s, and 1870s, which, as a result of the passage of the Morrill Act, attracted large numbers of women into higher education and helped to support the expansion of large co-educational universities throughout the US. The Morrill Act was sold as a democratic piece of legislation aimed at creating a system of 'people's colleges' useful for expanding education in agriculture and the mechanical arts. However, like so many other 'universal' or 'democratic' programs, expectations varied greatly and what was considered useful for women was quite different than that which was considered useful for men. Women were expected to study domestic economy or the household art while men were though to be more appropriately suited for the more rigorous studies of political economy, history, agriculture, and the mechanical arts.

As women's role in higher education expanded, albeit in feminized fields, male privilege in higher education diminished, threatening to undermine the status of men in society. It was in this environment that arguments began to emerge that women would become 'desexed' by their newfound academic strains. And it was in this environment that universities added physical education to women's curriculums, put quotas on the number of women medical school applicants accepted, and expanded engineering programs to increase the number of male students.

This paper examines the ways in which concern over women's health have been used to limit women's educational opportunities in the U.S. and the ways in which women have worked to overcome such limitations in the 19th and 20th centuries.

MoW07:2 Work and living conditions of the enslaved woman

Ribeiro Brito, Cláudia Márcia; Damasceno, Virna Soraya; and Nascimento Mazullo, Paula Maria Ministery of Labor and Employment

To present the work accomplished by the Special Group of Movable Fiscalization, instituted by the Governmental Order no. 549 and 550 from the Department of Labor and Job, in the combat to the slave work in Brazil, in what it specifically refers to the work and conditions of the enslaved woman's life.

On base in accusations presented to Ministery of Labor and Job from the victims, family, rural syndical entities, organizations no government and Earth Pastoral Commissions of Chatolic Churchu and others entities, the Special Group of Movable Fiscalization moves to the most distant areas and of difficult access in the country to free workers, mainly north, north-east and centre-west region where there is a adult concentration of slave work.

In this situation the women are found in degraded life conditions and submitted to the sexual exploration. The women work in the field with the workers men and they still have under their responsibility all the workers' feeding. Many times the women do only activities related to the household chores, which are not considered as paid activity, and through several months they worked without receiving wage.

The women are housed together with the other workers in huts covered with plastic, without walls and with floor of beaten ground, without sanitary facilities. They use the forest to do their physiologic needs, exposed to pricked of insects and attack of poisonous animals. These huts are located far to hundreds of kilometres of the closest cities. In this situation the workers don't have freedom to break the labor agreement. The women workers' age group varies among 15 years to 25 years.

The Group of Movable Fiscalization has as purpose to combat the slave and degrading work, and to verify the work conditions in this situation, besides with views to the penal proceeding by the federal police. It also verifies the work relationships between employers and employee; worker's safety and health conditions, including the women's work.

As result of the action of the Movable Group many things happened for example: the slave workers' freedom; the payment of the referred wages and labor indemnity to the workers; prison of the farmer owner, manager or contractor by the Federal Police in a serious case; the interdiction of the work place; the notification and the pecuniary penalty.

The co-ordinator of the group elaborates fiscal actions reports and send them directed to the Work Inspection General, also to the Federal Public Prosecution Service and Department of the Federal Police to produce proofs in criminal processes in its competence extents.

MoW07:3 Health care of women, Peruvian immigrants in Santiago, Chile

Ana Cortez Salas Santiago, Chile

The access to health of Peruvian immigrants in Chile is closely linked to their legal or labor situation. In the first place, the Chilean legislature on this subject was enacted in the

70's, at the height of the military dictatorship and therefore inspired in a doctrine of national security. It is a tedious process, in which a foreigner must present a work contract in order to obtain a national I.D. card and settle in Chile. On the other hand, the national I.D. card is essential to

obtain a work contract, with which a vicious circle begins. The lack of a national I.D. card is the first stumbling block that Peruvian immigrants encounter in order to access the public health services.

Secondly, the organizations that work with immigrants have repeatedly denounced the abuses that immigrant workers are subject to given their greater vulnerability. One of the most frequent accusations is that employers refuse to give them a work contract, even when they have their situation legalized. This situation has repercussions on their access to health since as they don't have a contract they are not contributing to the public health care system, and therefore lack a plan that assists them when they become ill.

In the matter of health, our efforts have focused on learning which are he principal characteristics of the Peruvian immigrant population who are attended in health care centers in Downtown Santiago, as well as identifying the main health problems which affect them.

Our methodology has consisted in examining the social and medical files in two public health care centers located in Downtown Santiago. On the other hand we have also carried out in-depth interviews with the purpose of obtaining qualitative information regarding this matter.

Regarding the results, we can report that in both health care centers over 85% of the Peruvian immigrants who are attended are women. The ages of the patients (both sexes) are concentrated in the 18-34 age group (72,5%). 61.9% said they were renting a room, while 14,5% share a room with some friend. As to the legal status, this situation reflects different policies in the two centers: in one all immigrants are treated regardless of their situation being legal or not (67.1% illegal, 32.9% with an I.D. card); in the other, only those with an I.D. card are attended, with the exception of serious cases (7% illegal, 93% with an I.D. card). It should be pointed out that the policy of requiring an I.D. card is the prevailing one in the public health services.

We have stated that the patients who are attended in the public health centers are women in full working and reproductive ages, so they tend to be concentrated in the Programs for the Care of Women, which include reproductive and sexual health care. In this sphere the principal problem is the late admission to the first pregnancy check-up (with over 22 weeks of pregnancy) due to the difficulties they encounter to register in the centers. The second problem is the undernourishment of the pregnant women of Peruvian origin, given that they usually loose their job when they become pregnant, and that they save money at the expense of their own nourishment in order to send it to their children and relatives in Peru. The third problem is that they practically do not use the family planning services of the center, which in addition to the separation from culture and family surroundings further exposes them to new unwanted pregnancies, and the risk of contracting STDs or HIV/AIDS.

In closing, we must indicate that the illnesses that the Peruvian immigrant population presents are those commonly found in the Chilean population. However, the chronic character of some of these (such as bronchial and lung diseases) have a relation to the labor exploitation to which they are exposed, the overcrowding and bad housing conditions, the lack of money to feed themselves better and buy the medications necessary to get well.

MoW07:4 Emigration And Hidden Gender Issues - Lack Of Care And Welfare

Vidya Ramji University of Bergen, Norway

Kerala, the most densely populated state in India, is noted -for high levels of social development comparable to those of Switzerland, Norway or the USA. The impressive human development indices led to the formulation of the Kerala model of development.

The paradox here is that this social development has been achieved in spite of low economic development and declining rates of State Domestic Product. Economists opine that the social development was largely sustained by the remittances sent to Kerala by the emigrant workers who migrate to the Middle East. Contract labour migration, as this movement is called, has emerged as the chief economic activity in Kerala. This paper examines the impact of this emigration on female workers and the consequent costs and benefits incident in their household, the economy and society of Kerala.

Initially women did not emigrate unless it was to accompany the husband who was the principal emigrant. But over time, changes occurred both in the home (Kerala) and host (Gulf Country) economies. The breakdown of patriarchy in Kerala and shifting patterns of labour demand motivated more women to emigrate for employment. While some of their problems are common as those faced by male migrants, female emigrants generate and face unique problems. Women emigrate in different levels as workers. There are the low paid, unskilled women who emigrate as housemaids and work in the domestic sphere. Then, there are skilled women who emigrate as health care workers, office technicians etc. Finally, there are professional doctors and engineers, The first two groups of women face most problems. The departure of the woman of the family, who provided all the care and household labour, causes irreplaceable damage in the household. All such services now, have to be provided by substitute care workers or close relatives. The supply of care decreases while demand for it increases. This paper analyses how the different categories of women handle this situation. While it appears to be a simple issue, it is in reality fraught with economic and social dimensions that are discussed in the paper. The paper concludes that economic reasons involved in emigration of women cause social disturbances.

MoW07:5 A Survey into the Work related and other Causes of non-compliance to Cervical Cancer screening among Rural and Urban Women of India

<u>Shrabanti Sarkar</u>, S. Mukherjee, S. Chakrabarty, S. Mittal, R. Dutta, R. Mandal, P.S. Basu Chittaranjan National Cancer Institute, Kolkata, India)

Cancer of uterine cervix is the most common cause of cancer related deaths among Indian women. In spite of the fact that this cancer can be largely prevented by systematic screening and treatment of precancer conditions, no screening facilities are available in the country.

Calcutta Cervical Cancer Early Detection Study (CEDS) Project, Chittaranjan National Cancer Institute, Kolkata initiated systematic screening for cervical cancer and precancer with financial assistance from Bill and Melinda Gates Foundation through Alliance for Cervical Cancer Prevention. Regular screening of women is being done at an urban clinic in a slum area in Kolkata and in four rural clinics set up in the villages of the districts adjacent to Kolkata. Within a defined area all women within the age group of 30 to 65 are invited to attend the counseling and awareness

sessions by trained field workers who make house to house visits. At the counseling sessions the Field Co-ordinators having masters degree in Sociology and adequate training, explain the benefits of screening and the details of the procedure to the women. It is clearly explained to them that the screening and subsequent investigations will be done free of cost. In spite of all our efforts approximately 60% compliance is achieved for screening. To look into the possible reasons of noncompliance a questionnaire survey has been started. The list of non-compliant women from the urban center and two of the rural centers has been taken and 500 women have been selected through computer generated random numbers. A female medical officer who is not involved with the Project is interviewing the selected women and filling up a structured questionnaire form after making house to house visit. The non-compliant women are classified into three groups: 1) those who do not want to go for the test; 2) those who want to go for the test but are unable to do so for various reasons; 3) those who went to the clinic but finally refused examination.

Among the women belonging to the first two groups a substantial number of women are found to be working in different kinds of menial labours, mostly on daily wages and some of them are the sole bread earners in the family. Most of the families live below poverty line. The clash between the clinic timings with their working hours, the fear of losing a day's wage, inability to get out of their work in time are some of the reasons preventing these women to avail of the facilities of screening. Even among the housewives the pressure of work at home is one of the major impediments leading to non-compliance to a potentially beneficial service being delivered to their doorsteps free of cost.

MoW07:6 Women, Privatization And Health Care Reform

Pat Armstrong

Department of Sociology and Women's Studies York University, Canada

What is happening in Canadian health care reform? What does it mean for women, given that women make up 80% of health care providers, paid and unpaid, and a majority of patients?

To address these questions, we use privatization as our central frame. Like health care reform, privatization, too, has many meanings. We define the term more broadly than in the traditional economic sense. For the purpose of this project, the privatization of health care refers to several different policy directions which limit the role of the public sector and define health care as a private responsibility. The privatization of health care includes:

- privatizing the costs of health care by shifting the burden of payment to individuals
- privatizing the delivery of health services by expanding opportunities for private forprofit health service providers
- privatizing the delivery of health care services by shifting care from public institutions to community based organisations and private households;
- privatizing carework from public sector health care workers to unpaid caregivers; and
- privatizing management practices within the health system, by adopting the management strategies of private sector businesses, by applying market rules to health service delivery and by treating health care as a market good.

Privatizing is the frame for capturing health care reform but what do we mean by "women". Just as we recognize that there are considerable differences across the country in terms of reforms, so too do we recognize that there are considerable differences among women in

the way they connect to health care. We do know that women are the main providers of care. Whether the car is paid or not, institutional or home-based. Women are also the main recipients of care, especially among the elderly. Although women are involved in much of the daily decision-

making about health care, they are much less visible among senior policy makers and managers. We are, then, interested in what consequences reforms have for women as providers and patients, and their impact on women's 'participation in the decision -ma—ing process. But we are equally aware that there are other significant differences among women, related to their physical, social, economic, cultural/racial locations and their age and sexual orientation. These, too, must be considered in assessing the consequences of reforms.

Which women are affected, in what ways, by which reforms are central questions in this work . While the privatization framework and the research is focused on Canada, there are similar patterns and issues arising for women throughout the world.

Pat Armstrong for the National Coordinating Group on Health Care Reform and Women, a collaborative group that brings together the five federally-funded Canadian Centres of Exceilence for Women's Health , The Canadian women's Health Network and Health Canada's Women's Health Bureau.

MoW08: Psychosocial Exposures and Health Effects in different Groups

MoW08:1 Stress, Social Support, And Health At Work From A Gender Perspective

Tuija Muhonen and Eva Torkelson Lund University and University, Sweden

Several studies have shown that women encounter more stress than men do both at work and non-work environments. Compared with men, women have also been found to experience more health problems. These studies, showing differences between women and men, have often been conducted in different work settings. There is therefore a need for research in which women and men are studied in equivalent jobs. In the present study we have had an opportunity to compare women and men working with similar tasks both at the managerial and the non-managerial level. This is quite unique considering the vertical and horizontal segregation based on gender in the Swedish labor market.

The aim of the study was to examine if women and men differed in perceived stress, social support and how these factors were related to their health problems. Of special interest was to investigate whether the perception of stressors, social support and health were related to power (a certain position in the organization and perceived control), gender or both.

Questionnaires were distributed to 422 women and men employed at both managerial and non-managerial levels in a Swedish telecom company. The questionnaire included items about demographics, perceived stress at work, social support, control and a health scale. A total of 283 (134 women and 145 men) questionnaires were completed, yielding a response rate of 67 %. The average age of the participants was 42 years.

The results showed that perceived control at work was significantly related to fewer stressors, fewer health problems and greater social support, whereas gender and managerial position were not related to any of these factors. The results indicate that the differences between women and men in earlier studies might be due to their differences in power.

MoW08:2 Developing an Occupational Health Service in a Social Services Department: Understanding the Stressors.

Margaret Coffey Dugdill Lindsey, Andy Tattersall Liverpool John Moores University, Liverpool

Introduction: The staff in the department in this study (n=2,271) is predominantly female (82%). Absenteeism levels were 9.28% in 1999, with stress related illness being the biggest contributor to overall sickness levels. According to the Confederation of British Industry, stress-related absence accounts for the loss of 187m working days a year in the UK, costing the country £12 bn (Stuart, The Guardian, March 2001). However, the Employers' Organisation (2000) annual workforce survey shows that social service staff suffer higher levels of sickness than the private sector *or* other local government staff. The Government has called for public sector bodies to reduce their average absence rates by 30% by 2003, whilst at the same time there is an accelerating crisis in social care recruitment and retention. Although there is a large body of research on work and stress, there is an absence of well-documented successful stress management initiatives aimed at primary prevention,

with the tendency being to apply interventions without an initial 'problem diagnosis' stage, making subsequent evaluation of the interventions extremely problematic (Cox, Griffiths & Gonzalez 2000).

Aims: The aims of this study were to develop an understanding of what stressors impact on social service staff. Only once these 'stressors' are identified can appropriate interventions be designed and targeted to redress the situation outlined above. The long-term aim of this project is to develop a user-led occupational health service, informed by the results of this baseline study and subsequently evaluate its effectiveness.

Methods: Following the collection of background information, in-depth interviews were carried out using a pilot sample (n=8) to investigate any issues which employees felt affected either their working lives or their health. Informed by the results of the interviews a questionnaire was developed containing questions specific to the department and a number of individual self-report scales available to assess a wide range of specific job stressors. These included the; Job-Demand-Control Model (Karasek 1979); Organizational Constraints Scale (Spector & Jex 1997); Job Satisfaction Measure (Warr, Cook, & Wall 1979) and General Health Questionnaire-12 (Goldberg 1972), a mental health measure. Additionally, 'open-ended questions' were used to ascertain; what could be done to improve working conditions; what the most difficult aspect of the job is; what type of occupational health service would be wanted; and any other comments.

Results: The overall response rate was 33% (n=774) of whom 633 (82.2%) were women. The results showed marked differences in the results of the two main staff grades. In this respect 'officers' are salaried and on a higher grade than 'manuals', who are paid by hourly rate. 'Officers' reported having high levels of control, extremely high psychological job demands, high levels of organizational constraints, low levels of support, and job satisfaction levels similar to published norms. The level of GHQ 'cases', i.e. those suffering from minor psychiatric disorder on the basis of psychiatric assessment, in this study was found to be higher than reported levels over a large range of occupational groups, with 39% of officers being defined as being a probable 'case'. Age, tenure and psychological job demands were positively correlated to GHQ scores. The 'manual workers', tended to report low levels of control, low psychological demands, low levels of support, low organisational constraints and low levels of job satisfaction. In terms of mental health scores, 22% of this group would be defined as being a probable 'case', with number of hours worked and psychological job demands being positively correlated to GHQ scores. The 'open-ended' questions indicated that not having enough time/staff/resources and support to do the job properly were the most problematic aspects of the job, along with difficulties associated with the service users. In terms of a future Occupational Health Service, counselling was the most requested service, followed by health promotion, access to stress management and alternative therapies.

Conclusions: The results indicate that there are problems within social services, negatively impacting on the mental health of it's employees. These need to be dealt with, not only to reduce stress-related illness and absenteeism, but also to work towards Government targets of 30% reduction in absenteeism by 2003 and to help in the recruitment and retention of SS staff nationally. Following this 'problem diagnosis' stage it is now possible, using a participatory action research paradigm, to work towards targeting specific interventions, developing a user-led occupational health service and carrying out a detailed evaluation of their effectiveness.

MoW08:3 The effect of supervisory behaviors on the health and well-being of men and women workers

Naomi Swanson, Paula Grubb, Christina Beam, Robin Dunkin and Laurence Schleifer National Institute for Occupational Safety and Health, Cincinnati, Ohio, USA

There is some evidence that supervisory support may be more important to the health of women than men (e.g., Vermeulen and Mustard, 2000), and that unfair treatment from supervisors is particularly detrimental to the health of women workers (e.g., Piotrkowski and Love, 1987). The present study utilizes a data set in which there are no differences in job tasks and responsibilities by gender. Thus, the hypothesis that differential treatment by supervisors, based on gender, may differentially affect the health and well-being of men and women workers could be examined, uncontaminated by gendered job differences. The subjects were 4695 customer service representatives (3247 women, 1448 men) at 15 call centres of an U.S. government agency, which had implemented a supervisory best practices intervention. Data were gathered prior to the intervention (baseline) and at 6-month intervals for a period of one year after the intervention implementation. The response rate varied from 75%-90% across the various call centres. Subjects completed surveys on working conditions, job stressors, supervisory best practices behaviors, and health and well-being. The present analyses examined the relationship between supervisory behaviors (teambuilding, communication skills, effective managing/scheduling skills, career/promotion assistance) and job satisfaction, stress, health, motivation, and commitment, using only the baseline data. Overall, women did perceive significantly less supervisory career/promotion assistance than men did. Stepwise multiple regressions were conducted to determine the relative importance of various supervisory behaviors on the outcome variables for the two genders. The control variables of age, ethnicity, job tenure, hour's worked/day, and job status (permanent/temporary; full or part time) were forced in first. The analyses revealed that supervisory teambuilding was the primary predictor of job satisfaction, motivation, commitment, and job stress for both men and women. On the other hand, supervisory career/promotion assistance was predictive of motivation and health for women, but not for men. In conclusion, these data indicate that perceptions of certain supervisory behaviors (career/promotion assistance) do differentially affect motivation and health in male and female workers.

MoW08:4 Gender differences and job stress in relation to social class

Ritsa S. Fotinatos The American College of Greece, Deree College)

This study shows the combined effects of gender differences and job stress in relation to one's socio-economic status. Data were collected via a questionnaire on a random sample of 2.500 men and women within the UK. The gender distribution was comparable to the national average on numerous variables. Females reported significantly poorer well-being than men, despite the fact that women reported using more coping strategies than men. Multiple regression analysis was performed to examine which stresses variables predict poorer health, and less job satisfaction, amongst men and women in different social classes.

MoW08:5 How job characteristics influence recreational activities of women and vice versa

Nicola Jacobshagen & Alexandra Kunz University of Bern, Switzerland

It is often speculated that recreational activities in leisure time provide the psychological important relaxation/stimulation to deal with the forthcoming demanding tasks at work. Therefore, it is interesting to note that until now no scale has been developed which can measure sufficiently the recreational activities in leisure time, and which still can be empirically applied in terms of time expenses.

In our research we constructed an inventory of hedonistic strategies, which will be published at Hans Huber Publishers in 2002. This inventory contains 129 recreational activities, and to each activity four questions were put: 1) Do you like this activity?, 2) Did you have the time/money/social contact to do this activity in the past four weeks?, 3) How many times did you actually do this activity in the past four weeks?, and 4) Would you prefer to do this activity more often, less often or about the same in the future?.

In a first study we found statistically significant differences between the gender. Women tend to like far more activities then men, but do not perform all of them. On the other hand men do like less activities (and with a lesser extent than women), but perform the ones they like fairly regular. Men show a better instrumental repertoire and better well being than women. In addition, women do a lot of activities which they do not really like and wish to reduce.

In a second study, which we will present, we measured job characteristics, well being and recreational activities with questionnaires. Besides pointing out gender differences we would like to answer the following questions: Are job and life satisfaction really influenced by recreational activities? Have women, who engage into childcare and household chores in addition to a paid job, a reduced hedonistic repertoire? Do job characteristic interfere with recreational choices, e.g. does stress at work interfere with recreational activities in a significant way? And because of the influence of stress at work on well being: could the hedonistic repertoire act as a moderator? If so, the concept of work-life balance should take recreational activities more into account.

We obtained interesting results to these questions and we will introduce the new instrument to collect data about recreational activities.

MoW09: Monitoring and Surveillance of Working Conditions and Health

MoW09: 1 Mammography: A Study of Promoters and Barriers to Screening in a Multicultural Work Setting

Lorraine Lynch Nagy World Bank, Washington DC, USA

The joint World Bank/International Monetary Fund Health Services Department (HSD) addressed a key occupational health concern when in 1994 it launched a Breast Health Program as part of its services to staff in Washington, DC. Internal health studies indicated that women in the Bank and Fund had higher than expected death rates and incidence of breast cancer, even when compared with groups of similar socio-economic status. The objective of the program was to promote preventive screening practices by bringing on-site mammography, health promotion activities and clinical services to the workplace. A program evaluation conducted 5 years later revealed that 30% of the target population of women 50 years old and older were not having an annual mammogram. HSD conducted a survey study in 1999 to explain these findings and to identify strategies to improve adherence to recommended screening guidelines.

Materials and Methods: The instrument was developed from the Breast Cancer Screening Questionnaire of the National Cancer Institute (NCI) The study adapted this survey to address differences between this working group and the general population; strong ethnic diversity, advantages in education, income and access to care. Prochaska and DiClemente's Transtheoretical Model of Behavioral Change (TTM) was used to explain stages of adoption in mammography, and to identify promoters and barriers to utilization. The database and analysis tools were developed using SPSS. For quicker access, submission and data collection, the survey was administered via webbased email, and the number of questions was reduced from 100 in the NCI questionnaire, to 58.

Results: of the 1.148 surveys sent out, 622 (54%) were returned. Respondents matched the overall target population, except for over-representation of regular staff vs. consultants in the survey group. Their self-report of mammography utilization in the previous calendar year (69%) was corroborated by independent insurance studies. Intention to have a mammogram in the next 1-2 years was noted by 89% of subjects, an "action/maintenance" variable for TTM, and indicative of compliance. The primary dependent variable was compliance vs. non- compliance, using a re-coded variable from a question on the most recent mammogram. Discriminant analysis differentiated the sum of 5 Pro and 14 Con Items of NCL:s TTM questions. Also included in the adapted survey were items dealing with clinical and self-breast examinations, risk and knowledge of risk factors, satisfaction with HSD's breast health services and demographic variables-all of which were used to evaluate HSD's program and the subject's readiness to utilize mammography and other breast health practices. The TTM question that predicted compliance was the belief that having a mammogram would benefit one's family (p.0.001). Barriers to mammography were two: fear of pain of the procedure (p.0.001) and the belief that one had lower risk than women the same age (p.0.001). Regarding other breast health practices, the response of "not feeling confident" in self-examination was associated with non-compliance with mammography (p.0.027) There was no relationship between the number of risk factors for breast cancer and compliance. Among the respondents, only

5% reported no risk factors and 22% had 3 or more (31% had no pregnancies and 34% gave birth after age 30). No significant differences were found in the survey group on any of the demographic variables: ethnicity, age, years in the Bank, type of appointment. Non-compilers differed on importance to them of convenience of on-site services (p.0.025). Email reminders for mammography rated as the single most important improvement needed in HSD's Breast Health Program.

Discussion: This study demonstrates the power of TTM to predict compliance with mammography and to identify which factors plays a role in the decision to be screened (or are barriers). In a group with high income, education and access to service, ethnicity did not differentiate. However the value placed on convenience did. To reach the 30% not in compliance, this program variable needs to be promoted, along with strategies to reduce pain and to increase knowledge about risk factors. The findings of this study have implications for program design, showing how to reach the target population with health education messages tailored to changing attitudes and beliefs in respect to mammography and other beast health screening practices. The result indicate that workplace mammography and related breast health service can make a difference in the proportion of women screened and therefore can potentially save lives.

MoW09:3 Health Examination in Workplaces in Japan: Are there any Gender Differences?

Yoko Araki The Hochi Shimbun, Health Support Office, Takashi Muto School of Medicine, Juntendo University

Occupational health services (OHS) are important in preventing the adverse effects of work on health and in promotion health and the maintenance of work ability of the work force. Health Examinations are one of the main tools in OHS. The survey was conducted to clarify the gender differences in health examinations in workplaces in Japan.

Methods: The data was collected from nation-wide surveys on employees' health conducted and published by the Ministry of Labour in 1982,1987,1992, and 1997. The surveys were performed by self-administered questionnaire, approximately 10,000 enterprises were selected in proportion to the distribution of the kind and the size of industries throughout Japan in each survey year. At the selected enterprises, approximately 20,000 employees were selected in proportion to the distribution of age, gender, occupational class, etc. throughout Japan. Among all the published data, data related to health examinations in workplaces were analyzed.

Results: In Japan there are two systems of health examinations. One is mandatory type of exams regulated by the Industrial Safety and Health Law, the cost is fully covered by employers, and the other is voluntary one, the cost is partially covered by health insurance or employers. As mandatory type of exams, there are pre-employment health examination, periodic general health examination (GHE), and periodic specific health examination for workers exposed to hazards at work. GHE is mainly done to assess the fitness for work and/or working abilities of employees regularly and also to identify risk factors or early signs of common health problems and implement relevant preventive, curable measures as part of the public health activities. The large part of the cost and time of occupational health staffs spend on GHE. Contents of GHE are body weight/height, visual acuity, hearing ability, chest X-ray, blood pressure, electrocardiogram, urinalysis, liver function, lipid profile, blood sugar, red blood cell count and hemoglobin. GHE is provided to all workers every year except for omission of some items for young people. The prevalence rate of diseases, such as hypertension, liver dysfunction or anemia, is different among sexes, however, there are no differences in the items of GHE with different sex or age. Although GHE is mandatory, the

performance rate of GHE is in proportion to the size of enterprises. The percentage of women workers who had GHE was lower than that of men in every survey. Women tend to work at smaller enterprises, it is one possible reason they have less chance to take GHE. Regarding cancer screenings, which are not mandatory, they are conducted with GHE or conducted as a part of human dry doc. Five cancer screening programs of stomach, uterus, lung, breast, and colorectum are common. Gastric cancer screening is made by upper GI series using Barium, cervical cancer screening is made by Papanicolau smear. Lung cancer screening is made by chest X-ray, and sometimes sputum cytology is added. Breast cancer screening is made by physical examination only, colorectal cancer screening is made by one-day occult blood test. The cost is covered partially by social health insurance or employers. Compared to the screenings of stomach or colon cancer, the percentage of workplaces which offered the chances of breast or uterus cancer screening was low, and the percentage of women workers who took the screening of breast or uterus cancer was also low. The prevalence rate of breast cancer in age from 40 and 60 is higher than that of stomach cancer, breast cancer screening was commonly not included in human dry doc menu, women should pay extra money to take breast or uterus cancer screening. The expenditure of women-specific cancer screenings was less covered by health insurance or employers than that of other gender non-specific ones.

Conclusions: GHE or cancer screening conducted in workplaces should be evaluated from the gender-specific views and also their effectiveness or purpose should be re-evaluated.

MoW09:4 Women who leave work during pregnancy and the risk of pre-term delivery and small-for-gestational-age birth

Lisa Pompeii, David Savitz, The University of North Carolina at Chapel Hill, USA

Several studies have examined why women terminate employment during pregnancy; however, only a few have examined the relationship between leaving work early during pregnancy and the risk of an adverse outcome. Adequate policies to protect pregnant women from possible workplace hazards that can lead to adverse outcomes cannot be implemented until this relationship is better understood. The purpose of our study was to determine whether women who ceased employment early during pregnancy were at an increased risk of preterm birth (PTB) or small-for-gestational-age (SGA) birth.

Women who were at least 16 years of age and not pregnant with multiple gestations were recruited into the Pregnancy, Infection, and Nutrition (PIN) Study, a prospective cohort study at UNC, during a prenatal visit between 24 and 29 weeks' gestation. They were contacted within two weeks of recruitment for a telephone interview and asked to provide information about the start and stop dates of the two longest held jobs during pregnancy, job responsibilities, physical demands, if they ceased employment during pregnancy, and if so, why. Lastly, a wide range of demographic and behavioral information was gathered in order to assess for possible confounding in the analysis.

A total of 1,827 women who were recruited into the PIN Study indicated that they worked at least 28 days during pregnancy. Almost 13% (n = 228) of these women delivered preterm and 8.3% (n=136) delivered an SGA infant. Preliminary analyses indicated that 519 (28.3%) women left work at some point during the first two trimesters of pregnancy; with 61.0% (n = 316) leaving because of their pregnancy and 39.0% (n = 203) leaving for other reasons. Age, education, parity, poverty level, and bedrest were identified as predictors of leaving work during the first two trimesters of pregnancy through multivariate modelling. Women who were between 16 to 25 years of age were 1.5 (95% CI: 1.1, 2.0) times more likely to leave work when compared to women who were 30

years of age or older. Women with less than 12 years of education were almost 3 times (95% CI: 2.0, 4.0) more likely to leave when compared to women with 16 or more years. Women with a parity of at least two, whose household income was below the poverty line, or who were advised to go on bedrest were more likely to leave, with risk estimates around 1.5 for all three (95% CI all \sim 1.2, 1.7). Although certain characteristics appear to predict leaving, those who left were not found to be at an increased risk of PTB (RR 1.1, 95% CI 0.8, 1.5) or SGA (RR 0.9, 95% CI 0.6, 1.3) when compared to women who did not leave.

Perhaps, the lack of difference in risk is a result of women removing themselves from workplace hazards and exposures. However, being younger and having fewer years of education predicted leaving. This is not surprising since these characteristics tend to lend themselves to unstable employment. If problems with employment exist prior to pregnancy it is not uncommon for them to continue or to be exacerbated as a result of pregnancy. Lastly, women who were of higher parity, who may have child care responsibilities at home, were also more likely to leave. Further analyses will allow us to examine whether certain health problems during pregnancy are more likely to lead to cessation of employment, as well as the risk of leaving during the third trimester and experiencing an adverse outcome.

MoW09:5 Safe motherhood in working women in Vietnam

Tran Thi Phuong Mai Ministry of Health of Vietnam

Status of women in Vietnam

Despite low GDP, indicators are very optimistic on gender- related issues such as in terms of education, literacy, labour etc.

The literacy of Vietnam women is rated at 82,3%-a relatively high rate among developing countries. A large number of women take part in the economic activities. Vietnamese women are actively involving in political and socio-economic life. In the 10th National Assembly, there are 26% women parliamentarians, a vice-president and a vice-chair of National Assembly are also women. The policy is on the way to become favourable for the women to take part in the socio-economical development of the country.

Women are still suffering in many aspects of socio-economic life. In education, the number of girls who drop out school is higher than boys. Girl's school life is also shorter than boys.

In labour and social affairs, women represent 50% of manpower, but only 44,9% income. The unemployment among women is higher than men (8,2% to 6,5% of men).

In MCH/FP, the results are encouraging: 95% pregnant women deliver in the presence of health worker, 83,5% pregnant women have TT vaccinated and CPR is 71,3%. However, the health budget is still inadequate (4USD per capita). Abortion rate is still very high.

Working women have right to take only 4 months of while pregnancy

Briefly, despite some achievement in gender equity, it needs more attention of government and policy-makers to facilitate the condition of the women in Vietnam today.

Main policies regarding women's health and family planning

Main policies regarding women's health and family planning Pre-, peri- and post-natal obstetric health care for each level.

Family size: each family has only 1 or 2 children, with 3-5 year interval.

Strengthen care for women during labour. Close surveillance of the women during the process of labor is obligatory. Asepsis should be made timely and properly.

Improve post partum care. Close supervision and care for the newly delivered woman within the 1st 6h after delivery to detect abnormal signs and symptoms in mother or baby. Advice should be given to the mother to breastfeed within 1/2h after delivery. Breastfeeding practices and use of FP methods should be encouraged.

Counseling on Safe Motherhood.

Actions must be taken following the National Action Plan for Women Progress: Improving mother and child health:

Develop and implement Program on Improving mother and child health Develop and implement Program on Primary Health Care, Expand IEC program on Health Care, Nutrition, Prevention, Treatment, AIDS, environment, and clean water.

MOH, Women's Union and other local organizations will promote a campaign involving the whole nation in women and child care, provide periodic examination for women, giving priority to the rural and remote areas, minorities, undeserved groups.

Intersectional cooperation

Reducing occupational diseases for women:

Revise the list of occupations that are not allowed for women. Minimize women working in dangerous jobs. Disseminate safety instructions for insecticide use .

Increase budget for professional insurance.

Improve the working conditions for women, health insurance, health visit for 100% working women,

Strategy for occupational diseases of women.

Increase the length of holiday for pregnant

MoW09:6 An Occupational Health Service Activity Supporting Nurses in Coping with Stress

Andrea Wittich Univeristy Hospital, Freiburg, Germany

Aims

In 1990 an occupational health service was set up at the Freiburg University Hospital. On request of the staff an organisational psychologist offers up to 5 group sessions which take place during working hours. Participation is voluntary. The subject at each session is chosen by the participants: conflicts within the nursing team, problems related to the care of patients, collaboration of nurses and doctors, work organisation. The study was designed both to evaluate the participants' assessment of the frequency of work-related stress before and after the intervention and to identify predictors for evaluation of the groups' benefits.

Methods

The study focused on 149 nurses who filled in the SUPBE-questionnaire before (t1) and after (t2) the intervention group. The questionnaire contains items describing work-related stress (N=21, based on 5 scales; t1 and t2) as well as items describing the expectations (t1) respectively the

assessment (t2) of the groups' benefits (t2). The differences in values (t2 - t1) were tested for statistical significance (t-test for paired samples). Subgroups of high versus low benefit were compared.

Results

After the intervention group, the perception of work-related stress decreased significantly in most items, especially in two scales ("problems in collaborating with doctors", "work organisation"). Participants' evaluation of the groups' benefits was not affected by personal characteristics (gender, age, job title, years on the job). However the expectations expressed beforehand had an effect on the participants' perception: higher and more specific expectations (t1) were associated with higher benefits (t2).

Conclusion

These intervention groups as a means of occupational health service modify the perception of work-related stress, probably by enhancing the coping-strategies of the participants. The participants' expectations are of significance for the assessed outcome and perceived benefit. A groups explicitly and unanimously defined focus and assignment based on the participants' expectations have to be handled thoroughly before its beginning.

MoW09:7 Gender differences in occupational health support in the Netherlands

Boukje Cuelenaere, Petra Molenaar AStri Research and Consultancy Group, Leiden, The Netherlands

Women in the Netherlands enter the disability benefit rolls to a fairly larger degree than men do. In the year 2000, 54% of the new benefits was paid to women, while the working population consisted of only 41% women. The risk for working women to enter the disability benefits was about 2.5 times higher as the risk for working men. Research showed that about 50% of the difference between men and women could be explained by different working conditions: women usually working under worse conditions. For the other half of the difference we turned to a debate that is going on for several years in the Netherlands now: do occupational physicians treat men and women in the same way?

Employees who are (long-term) absent from work due to sickness are given support by a occupational physician who is part of a professional occupational health and safety service (OHS), contracted by the employer. Thus, the chances of returning to work are partly influenced by the support and the behaviour of the occupational physician. In two projects we studied the support men and women receive from their occupational physicians. We used 50 in-depth interviews and we reanalysed surveys and literature. It turned out that occupational physicians undertook more activating and motivating interventions for men than for women. Women sometimes presented themselves somewhat more passive and hesitating towards return to work and the occupational physicians were not likely to change this attitude. Looking at the use of reintegration measures, more instruments were used for men and the instruments used (e.g. education, subsidies) turned out to be more successful for men. Furthermore it showed that these differences where more prominent in younger men and women, i.e. under the age of 45. It seems important that occupational physicians become more aware of the differences and their impact.

MoS06: Human rights for trafficked people

Chair: Sunita Kaista, Co-Chair: Woukko Knocke

MoS06:1 Human rights for trafficked people: Adequate health and social services (

Knocke Wuokko

National Institute for Working Life, Stockholm, Sweden

While trafficking is a world-wide phenomenon, the very nature of the phenomenon, illegal entrance into countries and underground activities, creates difficulties for research to approach the problematic with established methods, whether quantitative, qualitative or by participant observation. Due to the illegality, a main difficulty is to get in touch with victims of trafficking. Very little research has therefore been carried out on legal and humanitarian aspects surrounding the issue of trafficking. One opening, however, to find avenues and to come closer to an analysis of the problem, is through the different NGOs that are working as support net-works, centres of counselling and offering shelters for victims of trafficking. These organisations have over a number of years gained insights into important aspects of trafficking as a phenomenon and of persons, mainly women, who have been made victims.

The main purpose of the symposium 'Human rights for trafficked persons: Health and social services' is to make scholars and practitioners meet in order to discuss ways of making trafficking into a researchable problematic. A second purpose is to discuss what kind of initiatives should be taken to bring the issue onto the legal, social and political agenda of the international community and of individual states.

Whether we like to accept the idea or not, we have to see women who are victims of trafficking as 'working' women. The kind of 'work' they are lured and forced into, such as sexual services, slavery-like domestic labour, sweatshops in the garment and agricultural sectors etc., belong to the most exploitative, hazardous and demeaning kinds of activities in the underground economies. Victims of trafficking are more often than not victims of deception and coercion. In search of a livelihood, they have followed promises for regular jobs in other countries but have instead fallen into the hands of traffickers. They end up living under conditions, where their fundamental human rights are abused by the profiteer, the pimp or for that matter by the male head of household. The emphasis on health and social protection is paramount, given that trafficked persons are not entitled to such protection in the countries where they end up, while at the same time being in a situation of extreme vulnerability.

MoS06:2 A Historical Perspective on the Fight on Trafficking and Prostitution

Malka Marcovich

MAPP, Movement for the Abolition of Prostitution and Pornography and all forms of sexual violence and sexist discriminations, EU representant of the Coalition against Trafficking in Women

Trafficking and prostitution has been addressed through the scope of health for more then a century already. The regulationnist system at the end of the 19th century was legitimised by health considerations, a vision of human sexuality where male sexuality was considered as irrepressible, and female been at the disposal of male pleasure.

My presentation will give a historical perspective of the fight on trafficking and prostitution. It will analyse the impact of international, regional and national legislations on trafficking and prostitution.

I will look at the marginalization of women in prostitution and trafficking and the consequence on their health. The answers of governments concerning the rehabilitation of the victims of trafficking, their social policy programs, and some of the main danger we face today world-wide and in Europe on this issue that should be addressed at a global level, as an extreme form of violence against women.

I will compare and address critics on various rehabilitation programs in different region of the world, and will give example of the long time consequences of sexual exploitation on the lives of victims of trafficking and prostitution.

MoS06:3 Globalisation, crisis in livelihoods, migration and trafficking of women and girls: the crisis within

Upala Devi Banerjee

India program consultant for the solidarity center, an international labor rights organisation.

Background and Rationale: The accelerated pace of globalisation associated with trade liberalisation in the last decade has had far-reaching effects world-wide and nowhere has the effects been more pronounced than in South Asia. Loan conditionalities coupled with the structural adjustment program have rapidly disintegrated rural communities in South Asia and the impact has been felt the most on women and children, who are the most vulnerable. With the increase in poverty, food insecurity and insecurity of livelihoods, people have been forced to migrate out of their villages into neighbouring towns and cities. In most cases, such forms of migration have crossed geographical boundaries. As elsewhere in the world, such migration has also taken the form of trafficking, especially trafficking of women and girl children.

While privatisation policies have been depriving people over their customary rights over common property resources, the green revolution technologies have been causing serious ecological damages and in many countries of South Asia, have reached alarming stages of agricultural stagnation. Thus, livelihoods, especially amongst the rural communities, have been destroyed systematically by unregulated market forces and inefficient government polices resulting in an alarming increase of proportions of populations migrating or being trafficked. Trafficking in women and children cannot therefore be separated from globalisation and livelihood issues. As migration is often linked with economic gain or the expectation of economic gain, the same is true of trafficking.

An increasing number of South Asians migrate legally or illegally to other countries in search of employment. The numbers of women migrants increase by the day as they are compelled to take on more responsibility in supporting their families financially. Promises of better paid jobs, in some cases even the promise of a new experience and exposure, act as "pull factors" in this process. Although not all migrant workers face difficulties, there are many instances of workers trapped in highly exploitative conditions - e.g. low salaries or non payment of salaries, unreasonably long hours of work, abusive employers, more or different work than was in a contract, broken contract or non-employment, and lack of leave. These migrant workers are not covered by the labor laws or by social security safety schemes in the labor receiving country nor may they know how to access such services. They can become powerless and trapped in their jobs and unable to leave or upon leaving an abusive workplace situation they become illegal migrant workers --- subject to arrest,

imprisonment, fines or other punishment, and deportation. In these cases, workers therefore become trafficked migrants. Trafficking means, "the moving, buying or selling of persons within and outside borders for different forms of labour with or without the consent of the person subjected to trafficking".

Trafficked migrants are dependent on agents and employers and are extremely vulnerable to exploitation in an insecure and unfamiliar environment. They are prevented from escape by retention of passports and other travel documents, violence or threat of violence. Exploitation can take not only the form of economic but also sexual, psycho-social and other forms of violations of the migrants' human rights. Contrary to the common belief that trafficking happens only in the case of irregular migrants, it can also happen to persons who initially are regular migrants but are later trapped in extremely exploitative jobs or when they are misled about the purpose of their travel at the time of recruitment, or when they become targets of traffickers while looking for employment upon arrival in the receiving country. Such instances include women who arrive on entertainment visas and are forced into commercial sex work.

Trafficking in many cases can be linked to employment when persons move from one place to another for better employment opportunities. They become vulnerable in new environments and their employers and traffickers can easily violate their rights. Women workers who are most likely to find low-status and low paid jobs in the unorganized sectors can be extremely vulnerable in such instances.

Areas of Presentation: My paper presentation will thus cover the following areas:

- 1) The Globalisation scenario (and its impact) in the 3 South Asian countries India, Nepal and Bangladesh
- 2) The Crisis of Livelihoods and its links with migration and trafficking of women and children in the 3 countries
- 3) The situation of the trafficked women and girl children in these 3 countries (with a special emphasis on sexual exploitation and prostitution).
- 4) Government Laws and Policies on labour laws (including laws on migrant labour and trafficking)
- 5) Role of Non-governmental Organisations in combatting trafficking and tackling globalisation

MoS06:4 Some peculiarities of the Trafficking in Human Beings in Post-Soviet Central Asia

Aigul Alymkulova

Women Support Center,

During the first decade of independence of the Central Asian republics (CAR) a previously unknown problem of trafficking in human beings has occurred and become sharp.

The purpose of the work is (a) to acquaint public with the status and peculiarities of human (mostly women) trafficking in and from CAR; (b) to analyze the possible sources of the phenomena; and (c) to make suggestions for a future research. The methodology includes content-analyses of the major scientific and media publications on the issue (especially in CAR), expert survey and, possibly, analysis of work of the first anti-trafficking hotline in Kyrgyzstan "Stop!Traffic!".

The number of trafficked victims is hard to estimate due to the criminal nature of this business. Some researches suggest that about 4,000 women be trafficked from Kyrgyzstan annually. About four thousand women travel each year to the United Arab Emirates only.

Major trafficking routes repeat the shuttle trade routs going from CAR and ending in Turkey, the United Arab Emirates, Korea, China, and some European countries. The fall of the "Iron Curtain" boosted the number of people travelling abroad in search for new economic opportunities. Currently, there are about 500,000 shuttle traders (from Kyrgyzstan alone) constantly working and living in Russia. Women represent about 80% of all shuttle traders.

CAR feature functional division in trafficking process. The routs originate in all of these countries. Nevertheless, the transfer and receipt of the victims is peculiar only to some of them. For instance, specifics of Kyrgyzstan make it a clear transfer country. There are international, intraregional and intra-country routs of trafficking in CAR.

The reasons why women get caught in trafficking are well known. These are a poor economic state and lack of employment opportunities, as well as unawareness of the problem and traffickers' tricks. Many of the trafficked women enter the destination countries illegally (by using forged documents) and, therefore, avoid seeking assistance from government bodies. They receive neither social support nor employment benefits nor health insurance.

In these circumstances, there is a clear need to join counter-trafficking efforts of different agents, such as civil society organizations, governments and international entities. It is important to underline that only co-operative international approach in addressing trafficking problem can significantly shift the situation with this criminal business.

MoS07: Is a Female Boss like a Lonesome Cowboy?

Chair Anna Ekström

Organiser SACO, The Swedish Confederation of Professional Associations

MoS07:1 Is a Female Boss like a lonesome Cowboy?

Anna Ekström, Kerstin Hildingsson The Swedish Confederation of Professional Associations , SACO ,

Much is expected of today's managers in our moderbo? n working life. Being a manager is a complex task that simultaneously builds up and wears down the individual. While his or her work is relatively unrestricted and varied, with many opportunities to learn and develop, there are a great many managers who experience the downsides of the job, such as high work-load and stress, and who are unable to switch off from work. Insomnia is a phenomenon that is all too common.

As has been ascertained by SACO's management project, Swedish managers are not receiving the support they need, something that is reflected in the way that they are not always able to exercise good leadership. Poor support *for* managers leads to poor support *from* them. Failing to give them what they need to perform their managerial tasks well is the same as losing different kinds of productive and developmental capacity. However, it is hard to talk about "the manager's role" and "leadership" in the singular.

SACO is currently examining whether there are any important differences between the management conditions for woman and men, and if so, how they are handled by the former. Are there any differences in the support they receive? How do women find ways of handling their different managerial roles? Which strategies do female managers find successful and which strategies fail? Which get support and encouragement and which are opposed or obstructed?

And by whom? Managers often talk, for instance, about the imbalance between responsibility and duty and between resources and authorisation. They often perceive responsibility and duty as being pushed too far out in the organisations. Is this stress handled in different ways by female and male managers? The potential for reward – not only in terms of salary – differs from sector to sector of the labour market. There are many obstacles, practical as well as intellectual, to developing and using a reward system as a strategic tool. Are there also differences in how female and male managers are rewarded, not least in terms of career development?

A manager need not be the lonesome cowboy, riding assertively into the sunset. Managers need support like everyone else. But peer support from management groups is often inadequate or misdirected. "Co-opetition" (co-operation and competition) is a relatively new Swenglish term to describe how management groups operate. The group can provide support, but only on certain conditions and possibly not when most needed in difficult situations. It cannot be ignored that there is mutual competition between managers. How do female managers cope with being "lonesome cowboys"? Are there more valuable coping models for women in different competitive situations? Managers today are also assumed to be all-rounders – but without a magician's training. On top of

this, most public sector managers also lack adequate support and tools. Do the managerial courses and tools on offer suit female and male managers alike?

We will be presenting and discussing these and other aspects of women's leadership at a seminar to be held during the "Women, Work and Health" conference.

MoS08: Working conditions and musculoskeletal disorders

Chair Karen Messing, Co-Chair: Lena Karlqvist

MoS08:1 Musculoskeletal problems, sex and gender: some precautions

Karen Messing et al¹

CINBIOSE, Université du Québec à Montréal, Montréal, Québec, Canada

Studying musculoskeletal problems in mixed-sex samples poses some problems for the researcher. Women and men tend to work in different types of jobs with specific exposures. Women and men differ anatomically and physiologically, although within-sex variance is usually greater than average differences between the sexes. In planning and carrying out studies, attention must be paid to exposure differences, physiological differences, interactions between body proportions and worksite dimensions, and gender-associated extraprofessional exposures. Precautions must be taken when choosing the research question, choosing the population, selecting the sample, choosing the variables, choosing the research instrument, analysing the data and reporting the results. Treatment of sex as a confounder should be avoided, since it is often a surrogate for exposures that should be examined directly. Interactions between sex and other characteristics such as age and ethnicity in relation to exposures and effects should be examined.

¹ Messing K (1), Punnett L (2), Bond M (3), Pyle J(4), Alexanderson K(5), Stock SR (6), Wegman D (2), Zahm S (7), de Grosbois S(1)

¹CINBIOSE, Université du Québec à Montréal, Montréal, Québec, Canada

²Department of Work Environment, University of Massachusetts Lowell, Lowell, MA, USA

³Center for Women and Work, University of Massachusetts Lowell, Lowell, MA, USA

⁴Department of Regional Economic and Social Development and Center for Women and Work, University of Massachusetts Lowell, Lowell, MA, USA

⁵Division of Social Medicine and Public Health, Department of Health and Society, Faculty of Health Sciences, Linköping University, Linköping, Sweden

⁶Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Ouébec, Canada

⁷National Cancer Institute, USA

MoS08:2 Musculoskeletal disorders among women in the call center of a bank in são paulo, brazil.

L.E.Rocha, University of São Paulo

D.M.Raab Glina, Reference Center for Workers' Health of Santo Amaro, Municipality of São Paulo

Objectives: To examine the working conditions and to determine the prevalence of symptoms of musculoskeletal disorders among women employees of a call center in a bank of São Paulo, Brazil.

Methods: Ergonomic work analysis of the job of women operators, was performed with observations, photographs, hearing of tapes call and interviews, and 96 questionnaires were answered voluntarily by active operators.

Results: More females belonged to the age group from 18 to 23 years (67,4%) and only 12,6% were more than 35 years old. 22,3% of the women had children. Task: The operators listened by headphones to the customer and entered the name by the keyboard. The computer system displayed the relevant information and they search the information on different screens, checking and asking the customer further information. They remained seated 95% of the time. The operator looked primarily at the screen and rarely to the keyboard. Each call lasted from 1 to 3 minutes according to the amount of information or operation to be performed. Each customer could request until 10 operations per account including different products from the bank. They answer one call after other without breaks. The daily working time was 6 hours and the only rest pause is about 30 minutes. Working Conditions: Workstation: there were not adjustable chairs, no supports for arms, wrists and feet, with low height of video display terminals, botton for in calls located distant from the working zone. Equipment: problems with headset, hard keyboard, slow system, low contrast and reflexes on the screen. Environmental conditions: noise due to the lack of quality of the headset which forces the operator to speak loudly and the presence of many operators talking in the some place, inadequate temperature (cold). Work organisation: lack of up to date information, scripts followed strictly presenting wrong and old information, the appraisal took in account electronic monitoring of the time of each call, time spent out of workstation and qualitative hearing phone calls, constant overload caused by excess of calls, overtime journey. Each mistake in the operations the supervisor fills a report of non-conformity, which the operator must sign. If there happens a loss of money, caused by the operator she may even have to pay. Psychosocial Factors: 70,5% referred fast pace for at least half the time; 58,3% considered that they could make few decisions about how to work; difficult relationship with clients, difficulties to obtain information from the supervisor when there was a doubt while answering to a client.

Musculoskeletal Symptoms: 67,7% referred pain in upper limb during last year. The location was: 30,2% neck, 26,0% shoulder, 40,6% wrist, 20,8% back.

Conclusions: Preventive measures to musculoskeletal disorders should include improvement of workstation ergonomic, equipment, environmental conditions, but specially work organization and psychosocial factors.

MoS08:3 Gender aspects of working conditions and musculoskeletal health among professional computer users (Nr 297)

Ewa Wigaeus Tornqvist, Maud Hagman, Eva Hansson Risberg, Anita Isaksson and Allan Toomingas; Programme for Ergonomics, National Institute for Working Life, Stockholm, Sweden Mats Hagberg; Department of Occupational Medicine, University of Gothenburg, Sweden Lena Karlqvist; Programme for Research on Development Processes, National Institute for Working Life, Stockholm, Sweden

Aim: To describe the prevalence of musculoskeletal symptoms and working conditions among male and female professional computer users.

Methods: This cross-sectional study reports from the baseline assessments of a prospective cohort study. 498 men and 785 women participated (response rate 79% and 88%, respectively), most of whom were professional computer users in different occupations (e.g. administrators, secretaries, engineers, call-center operators, graphic designers, and librarians). Work related exposures and musculoskeletal symptoms during the preceding month were assessed by a questionnaire. The questions about symptoms specified the duration (days) of pain or ache in the neck, shoulders, upper and lower back, upper arms, elbows/forearms, wrists and hands/fingers, respectively (including numbness/tingling in the hands/fingers).

Results: Women had a higher prevalence of symptoms (≥ 3 days) in all body regions, than men. It was almost twice as high in the neck, shoulder, upper arm and forearm/hand regions. The highest prevalence was observed for the combined neck/shoulder region, 58% among women and 31% among men. The prevalence of symptoms was higher among women than men in most occupational groups. The female call-center operators had the highest prevalence of symptoms of all, irrespective of body region.

A somewhat higher proportion of women reported working conditions that, in previous studies, have been associated with neck- and upper extremity disorders, e.g. many hours of daily computer work, extended computer work without breaks, many hours of daily data/text entry, lack of variation in work tasks, a position of the mouse on the table that cause awkward working postures, high mental demands, low decision latitude and high job strain. In average men spent 3.6 h/day and women 3.9 h/day at the computer.

Conclusion: Women had a higher prevalence of musculoskeletal symptoms in all body regions. A somewhat higher proportion of women reported working conditions that, in previous studies, have been associated with neck- and upper extremity disorders among computer users.

MoS08:4 The interaction of gender and work organization: increasing risks for women workers

Vanise Goulart Pacheco Federal University of Minas Gerais, Brazil

The aim of this case study was to evaluate the effects of the interaction between Gender and work organization for the development of Work-related upper limbs disorders (WRULD's). The research took place in a big telecom company in the south-east of Brazil. The process of work was transformed for the intensive use of information technology in 1994. In the last decade the most frequent work related illnesses among telephone operators were WRULD's and the women were more affected than men showing indexes of 80% of the cases.

When analyzing the work organization we focused on these topics: the task's demands and related workload, rates of productivity, and the operational performance of workers. When researching Gender factors we focused on: the stereotypes of Gender linked with the occupation, the sexist process of selection, the Gender-directed demands (by the staff, the clients and the telephone operators also), and the abilities and characteristics (constructed by Gender) required for the work process.

The methodological approach combined that of the social science with some aspects of ergonomic analysis. In a first stage we conducted group and individual interviews with telephone operators as well as individual interviews with the managers and the Human Resources responsible. In order to achieve the clients' Gender stereotypes, their expectations about and demands on the telephone operators that they were interviewed too. In a second step we recorded the conversations between clients and telephone operators and analyzed the conversations in a systematic way. Finally, we also considered the indicators of productivity.

The analysis compares the results for the workers of both sexes and shows the existence of stereotypes associated with the female Gender linked with the occupation of telephone operators. Those elements were more frequently attributed to the female than to the male workers. We also found different stereotypes to describe telephone operators of one and another sex.

The results show a Gender influence on the work organization mainly represented by: the exigency of comportment associated with the female gender for women workers, emission of distinct operational modus for both sexes, the intensification of affective and cognitive workload associated with the work process, a relative increase of repetitiveness for the women workers, the intensification of productivity in the shifts with higher concentration of women workers, the reduction of intervals between two work cycles, the intensification of stress, and other work related psychosocial factors for this group.

It became clear that the risks related to WRULD's in a same title occupation can differ for women and men even when they execute the same tasks. The Gender factors influence the organization of work creating specific demands for the workers of each Sex, and absorbing the gender-informal abilities of the workers. The results show that the Gender stereotypes interfere in work organization and increase the health hazards entailed in the work of female telephone operators augmenting the rate of WRULD's.

MoS08:5 Musculo-skeletal disorders in nurses and physiotherapists (Nr 393)

Barbini Norma Squadroni Rosa Epidemiological Observatory Elderly Workers- INRCA – (Italian National Research Centre on Aging)

Objectives:

The problem of ageing of health women workers and musculo-skeletal disorders (MSD) is faced by studying the presence of two or more complaints in the back, upper limbs and lower limbs.

Methods:

A survey, using a questionnaire (the shortened Italian version of the ESTEV-VISAT), was carried out in several wards of the geriatric hospital to determine the prevalence of MSD in a sample of health workers (nurses and physiotherapists). Several working conditions were considered: physical variables (awkward postures, heavy loads, rapid and frequent walking, etc), organisational (time pressure, to be interrupted at work, etc) and psychosocial (appreciation and recognition). Using both simple and multiple linear regression, the association between the presence of two or more complaints and cumulative index of exposure to 2 or more risks at work was evaluated. The importance of the age factor was also analysed.

Ergonomic study was also carried out by observing whole work shifts.

Results And Discussion:

The distribution of pain is mainly concentrated in the back (81% of the sample) but can also be consistently found in the upper limbs (39%) and lower ones (54%). More than 50% of the workers reported 2 or more complaints in different muscolo-skeletal regions. In nurses these problems already appear before the age of 40, suggesting, for this professional category, a possible risk of pathological ageing of the muscolo-skeletal apparatus.

The presence of 2 or more complaints was found to be associated with physical cumulative index for physiotherapists and with organisational cumulative index for nurses.

Ergonomic work analysis showed that care giving determines the maintenance of awkward postures, such as stooping more than 45° and bending and twisting the trunk for prolonged lengths of time (up to 5 hours consecutively), which represents a physical risk.

Besides, the fact that the MSD are mainly associated with organisational characteristics of work, and especially with work pressure, suggests that greater attention must be given to work organisation.

MoS08:6 Discrimination against women in occupational health compensation for musculo-skeletal disease

Katherine Lippel Université du Québec à Montréal, Law Department

Criteria for evaluating workers' compensation claims for occupational disease are strongly linked to medical expertise as supported by scientific study, yet decision-makers are not necessarily familiar with the meaning of the scientific studies presented to them. While this is a problem for all claimants, who bear the burden of proving that work caused their injury, the adverse impact of misunderstanding of scientific data can have particular consequences for women workers, whose work more often appears to be benign.

This presentation will examine empirical data drawn from analysis of 314 workers' compensation appeal tribunal decisions regarding compensation claims, in Québec, for repetitive strain injury. For the purpose of the study we randomly selected decisions rendered between 1994-1996 regarding diagnoses of tendinitis, epicondylitis and carpal tunnel syndrome. We then did a follow up study of significant legal decisions by the same tribunals, rendered over a longer period (1992-1998). Results from both studies indicate that women workers are significantly less likely than their male counterparts to have their occupational disease claims accepted by the appeal tribunal.

The presentation will provide examples of the use and misuse of scientific data in the context of adjudication and will examine and explain the adverse impact of the process on women claimants. Participants will be provided with indices, which will assist in identifying discriminatory practices of adjudication and strategies to overcome these practices.

When workers' compensation claims are wrongly refused this distorts the statistics regarding work injuries. These distorted statistics will then be used to determine priorities for prevention of injury and disease. When gender bias leads to systemic refusals of claims, serious consequences with regard to both compensation and prevention result.

MoS09 and MoS14: Gender and Work-related Health Issues: Moving the Agenda Forward, 1

Chair: Piroska Östlin

Organiser: the World Health Organisation

MoS09: 1 Gender and Work-Related Health Issues: moving the Agenda Forward

Piroska Östlin

National Institute of public Health, Karolinska Institute, Stockholm

One of the most striking developments during the last few decades is the increasing female share of the labour force and the recognition of women's indispensable role in international, national and household economies. Working life has a paramount importance in relation to the hierarchical ordering of society in terms of wealth, power and prestige, which in turn generates inequalities in the distribution of resources, benefits and responsibilities. Since social position is strongly associated with life chances and living conditions, it also has a strong influence over good health. Sharply gender segregated labour, which can be observed world wide, both in the domestic and public domain, plays a significant role in determining women's and men's social status in society and explains their differential exposures at work to health promoting and health damaging factors. The increasing visibility and importance of women's labour worldwide has challenged the view of women's and men's socially and culturally determined roles and responsibilities. Occupational health research and policy, that traditionally has conceptualised work as paid work undertaken by men, and accordingly focussed on occupational health risks in male-dominated occupations, can no longer be justified.

The main purpose of the symposium is to provide a state-of-the-art understanding of gender issues in health related to a) industrial work, b) agricultural work, and c) sex work. Prominent experts within these fields present research findings on the health of women and men related to their working conditions, identify gender biases in occupational health research and policy, describe past and current policy responses to the observed health problems. The following panel discussion aims at drawing up recommendations for WHO on how to promote international efforts to address gender concerns in work-related health issues. Presentations and recommendations will be published as proceedings from the Congress by the Department of Gender and Women's Health, WHO, Headquarters, Geneva, Switzerland.

MoS09: 2 Gender and Work-related Health Issues in Industrial Work

Elisabeth Lagerlöf

European Foundation for the Improvement of Living and Working Conditions, Ireland

Work is a central determinant of women's health and women's work encompasses work in all industrial sectors, as well as work in household and community. The work-related health

outcome differs between women and men, and is created by complicated processes involving a whole set of conditions created by labour and social policies, the male as a norm for health and safety, methods for work environment research and development of practises at the workplace. The results are invisibility both of women's risks at work and difficulties in identifying the health effects. Working conditions includes, but is not limited to, traditional occupational health and safety concerns. It also includes all aspects of work organisations including working time, flexibility and work intensity, relations at work as well as the conditions resulting from coping with the reconciliation between work and family life.

Studies from all over the world show a repeated pattern, namely that women and men have different jobs and different working conditions. This strong job gender segregation results in different health outcomes. Work-related health is also not equally divided between all women. Women in predominately male blue collar work, elderly women and migrant women worker have a much higher share of work-related illness, as well as women living in poverty. The most obvious goal, namely equality in work-related health outcome between men and women, is not possible, since health outcome of work is depending on biological/physiological characteristics, psychological characteristics, and living and social conditions. Any attempt to equalize male and female life expectancy and morbidity rates are therefore doomed to failure. Instead the politics must be focused not on the health outcome, but on the exposure and conditions that provide the basis for work. This could include

- More cooperation between WHO and ILO providing health and safety criteria for working conditions, as well as for new forms of work organisations, in particular to prevent the shift of work-related risks from rich countries to poor ones
- Provide gender-sensitive indicators on quality of work based on better statistics and which also takes into account the well being of the workers as well as the reconciliation between work and family work.
- Review current research priorities for any gender and age bias
- Give women and men equal access to those resources which they need to realise their potential for health

MoS09: 3 Gender and Work-related Health Concerns in Agriculture

Sophia Kisting

Occupational and Environmental Health Research Unit School of Public Health and Primary Health Care University of Cape Town

Agriculture is the primary source of employment for women in most developing countries. In some regions women produce up to 80 percent of basic foods. In spite of this presence, far less is known about women's occupational health and safety (OHS) in agriculture than about men's. Work in the agricultural sector is hazardous. This affects both women and men but patriarchal societal norms and economic and political discrimination prescribe the nature of women's work in agriculture and therefore the specific hazards they are exposed to.

The nature of women's work results in physical and psychosocial health problems not traditionally recognised as being work-related thus the true impact remains largely unmeasured. Women are concentrated in the low paid, poorly regulated and poorly organised sections of commercial agriculture and in subsistence farming. They constitute the majority

of seasonal and/or casual workers. This partly explains why OHS problems for women are often unrecognised, underreported and not compensated.

The burden of disease from preventable health problems for poor people remains enormous. This is particularly true for women who have the additional responsibility for child care and unpaid household duties. This invisible work of women remains an unrecognised contribution to the formal agricultural sector. Women are poorly represented in health and safety structures and opportunities for education and training are limited. Health services and medical surveillance tend to be poor in rural farming areas. This lack, as well as the impact of poverty, compromises the immune system and potentiates the effects of hazardous exposures.

The economies of many developing countries are heavily dependent on agricultural and flowers, fruit and wine for export to developed countries have become part of export economies. Globalisation and market forces such as structural adjustment reforms and liberalisation of trade policies have resulted in the intensification of agricultural production even in poor countries. One of the outcomes in developing countries is the increased use of agri-chemicals in both commercial and subsistence farming when many developed countries are implementing programmes for pesticide reduction.

The panel discussion on women and agriculture will seek to address preventive measures in relation to OHS. Under-estimation of women's work-related ill-health and gender insensitive risk assessment, medical surveillance and research will be examined. Recommendations will focus on interventions to prevent work-related ill-health and reduce poverty. This will include women's pivotal role in economic and policy decisions, the need for strong women's organizations linked to national and international networks and the necessity for North-South equity with regards to standards for occupational health and safety.

MoS09: 4 Whose lives? Women Sex Workers, States and NGOs

Meena Shivdas Sussex University, UK

This paper elaborates on the varied work situations of women sex workers and their health conditions to identify conceptual and methodological issues that have engaged sex workers, activists and researchers in debates on sex work globally and asks whether the interventions made on sex workers' behalf necessarily benefit them? ertain common features characterise sex work, particularly ambivalent laws and policies, the perception that women sex workers are vectors of infection, social stigma faced by the women and their vulnerable health conditions. Invariably, health and other interventions on 'empowerment' made by state institutions and non-government organisations are premised on notions of rescue and rehabilitation.

This paper examines women sex workers' lives to raise issues and concerns for consideration by state and non-state actors and institutions in formulating interventions. Using empirical evidence from field research in Mumbai, India and information from academic and activist sources elsewhere, the author highlights women sex workers' health seeking behaviour, the social consequences of their work and the implications of policy proposals on

sex work and HIV for their lives. The way sex workers have responded to both policy and NGO interventions in their lives is discussed with a view to illustrating mobilisation initiatives in sex worker communities. These initiatives not only seek to change the terms of the trade but also tell us what sex workers think and want from interventions and debates on their realities. Women sex workers' words, this paper will demonstrate, provide insights for methodological considerations in research and help to map out opportunities and constraints in implementing policy on sex work and health.

MoS10: Women and Sickness, Absence/Disability Pension, 1

Chair: Kristina Alexandersson

MoS10: 1 Why do women have higher sickness absence?

Kristina Alexanderson Univeristy of Linköping Sweden

In countries from which data is available women in general have higher levels of sickness absence than men, both when data on incidence and duration of absence are considered. In Sweden these differences have increased much the last decade. Sickness absence is a multifactorial phenomenon influenced by factors at different structural levels (society, work site, family, individual). In the scientific literature there is a knowledge base for the following six explanations of the gender differences in sickness absence:

The higher morbidity of women. (If more women are sick more women also will be sick listed).

There is less knowledge in medicine on how to diagnoses, treat, rehabilitate, and prevent ill health in women. (Women more often than men thus do not get efficient treatment or rehabilitation, which leads to longer periods of sickness.)

When ill, women and men are treated differently in health care, work, insurance company, etceteras. (These differences tend to lead to longer sickness absences for women. The knowledge base here is yet very scarce but women for instance, have been shown to be offered cheaper rehabilitation measures.)

The structure of the labour market; women have other types of job and other conditions when in the same job. (This is related to the strong gender segregation of the labour market, vertically and horizontally, the increase in demands in female-dominated jobs, and to a narrower spectra of jobs for women, rendering difficulties to return to work when sickness absent.)

Gender differences in unpaid work.

Gender differences in employment frequency, employment intensity, and etceteras.

In conclusion, more knowledge is needed both on reasons for and consequences of the gender differences in sickness absence.

MoS10: 2 Employee control over working times: associations with subjective health and sickness absences

Leena Ala-Mursula

Center of Occupational Health, City of Oulu, Finland

Introduction: - Several studies have demonstrated an association between job control and health. Markedly less is known about the health effects of having control over working times. A high level of worktime control can provide opportunities to adjust job demands with the prevailing state of resources. Worktime control may also help in integrating working life with private life.

Study objective: - To investigate the impact of employees' worktime control on health, taking into account other aspects of job control.

Material and method: The data were drawn from the on-going Ten Town Study, a cohort study exploring the relationships between psychosocial factors and health in the personnel of ten Finnish municipalities. In November 1997, 6442 identifiable, full-time, permanent municipal workers

(1490 men and 4952 women) responded to a questionnaire assessing self-reported health and psychological distress, health behaviour, job demands, job control and worktime control. Response rate was 67%. Worktime control was operationalized as perceived control over starting and ending times of a workday, the opportunities to take breaks and to deal with private matters during the workday, the scope for influencing the scheduling of shifts, the scheduling of paid days off and vacations, and the opportunities to take unpaid leave. Health was measured through three different outcomes: subjective ratings of general health and psychological distress and register-based sickness absences. The sickness absence data of the respondents were obtained from the employers' records. Sick-leave periods in 1996 were treated as baseline absenteeism and the total of sick-leave periods in 1997-98 as the outcome measure.

For the statistical analyses the measures of worktime control, job control and job demands were divided into quartiles and treated as categorical variables. The associations of worktime control with self-rated health and psychological distress were studied by means of logistic regression and

the associations with sickness absence by means of hierarchical Poisson regression models. Adjustments were made for demographics, measures of health risk behaviour and baseline absence, as well as other work characteristics. Main results: - In women, self-rated poor health and psychological distress were more prevalent among those in the lowest quartile of worktime control compared to those in the highest: odds ratios and their 95% confidence intervals for poor health and psychological distress were 1.8 (1.5-2.3) and 1.6 (1.3-2.0), respectively, after adjustment for demographics, health behaviour and other aspects of job control. Correspondingly, the adjusted sickness absence rate was 1.2 (1.1-1.2) times higher in women with low worktime control than in women with high worktime control. In women, poor worktime control predicted sickness absence even after controlling for baseline sickness absence. In men, no significant associations between worktime control and health were found in the adjusted models. These results, obtained from the total sample, were replicable within a homogeneous occupational group comprising women and men, the teachers.

Conclusions: - Exploration of specific aspects of job control provides new information about potentially reversible causes of health problems in a working population. Worktime control was an independent predictor of health in women but not in men. Dissimilarities in the distribution of occupations between men and women are not a likely explanation for this difference. Current trends of differentiation and increasing flexibility of working times may emphasize the importance of this control dimension.

Key words: worktime, control, health, gender

MoS10:3 The Double Burden – A Source of Gendered III Health?

May Kevin

Turku University Central Hospital Turku Finland

Objective - To investigate health effects of different aspects of paid and unpaid work load with multiple health measures.

Design – Analysis of questionnaire and absence data collected during 1997-1998

Setting – 8 towns in Finland

Participants – 6442 full-time municipal employees (4952 women and 1490 men)

Results – Long total work hours associated with a higher rate ratio of medically certified sick leave for both men and women. Over 70 hours in paid and unpaid work per week associated with higher rate ratio of self-certified sick leave for men. Long total work hours (over 50 hours in paid and unpaid work per week) associated with a higher odds ratio of mental distress and extremely long total work hours (over 100 hours in paid and unpaid work per week) with a higher odds ratio off suboptimal health for women. Solely shouldered responsibilities associated with self-certified sick leave and mental distress for women The experience of work-home interference correlated with sickness absence, mental distress and subjective health problems for both genders, as did the experience of home-work interference, with the exception of subjective health problems for men.

Conclusions - The gender differences in health found were likely to mount from a traditionally gendered home setting. The results suggested vulnerability to time-stress from the "non-gender-traditional" domain and resistance to time stress from the "gender-traditional domain.

MoS10:4 Work-related stress, salivary biomarkers and sickness absence days among female emergency department nurses

Yong Yang, David Koh, Vivian Ng, Sin Eng Chia National University of Singapore Francis Chun Yue Lee National University Hospital, Singapore

Objectives: To assess and compare the self-reported stress of emergency department (ED) and general ward (GW) nurses, to assess and compare the salivary IgA and lysozyme levels between the two groups of nurses, to assess and compare the sickness absence days in the past six months between the two groups of nurses, and to investigate the relationships among stress, salivary biomarkers and sickness absence days.

Methods: One hundred thirty two of 208 (63.5%) female ED and GW nurses participated the study. A general health questionnaire (GHQ) was used to measure self-perceived stress. Onesentence question about how many days of sickness absence due to URTI in the past six months was used to measure sickness absence days. ELISA methods for different biomarkers were used to determine the salivary IgA and lysozyme levels.

Results: On GHQ, ED nurses had higher scores (mean 1.99, 95% confidence interval [CI], 1.90 – 2.07) than GW nurses (1.80, 1.70 – 1.90). ED nurses had lower secretion rate of IgA (geometric mean [GM] 49.1, 95% CI 43.0 – 57.1 μ g/min) and lysozyme (GM 20.0, 95% CI 16.9 – 23.8 μ g/min) than GW nurses (68.2, 59.9 – 77.6 μ g/min; 30.5, 24.5 – 38.0 μ g/min). ED nurses, who had a high

level of stress, had significant more days of sickness absence than that of GW nurses ($x^2 = 8.01$, p < 0.05). Significant correlations were observed between GHQ and Log salivary IgA or lysozyme secretion rates (r = -0.21 and -0.18, p < 0.05). Boundary but insignificant correlation was shown between GHQ and sickness absence days (Spearman's r = 0.15, p = 0.082). Sickness absence days was insignificantly but boundaryly correlated with salivary IgA (Spearman's r = -0.15, p = 0.084) and with salivary lysozyme (Spearman's r = -0.17, p < 0.05).

Conclusion: ED nurses, who reported a higher level of professional stress, showed significantly lower secretion rates of salivary IgA and lysozyme compared to GW nurses. As these salivary biomarkers are the end points of mucosal immunity, the findings supported the inverse relationship between stress and mucosal immunity found in other studies. Sickness absence, "an indicator of general health", showed positive trend relationship with stress and negative correlation with salivary biomarkers, further supported the negative relationship between stress and nurses' health.

Key Words: ED nursing, GHQ, Salivary IgA, Salivary lysozyme, sickness absence days.

MoS11 and MoS16: Union's Strategies for Equal Opportunities and Better Working Conditions, 1

Chair: Laurent Vogel

Organiser: European Trade Union Federation

MoS11:1 A European Survey on Gender Dimension in Health and Safety

Name: Laurent Vogel

European Trade Union Technical Bureau for Health and Safety

The TUTB did a survey on the gender dimension of workplace health and safety in association with two research centres at the Brussels Free University and with backing from the Belgian EU Presidency. The survey was mainly questionnaire-based, supplemented by desk research and a seminar attended by a hundred-plus participants on 16 November 2001 in Brussels.150 individuals and institutions in all EU countries apart from Ireland replied to the questionnaire. The biggest share of responses came from Spain and Italy (31 each), followed by France and Germany (15 replies).

Most respondents were trade union organizations (31%), research institutions (21%), agencies responsible for giving a lead to prevention policies (13%) and prevention services (9%). Institutions responsible for equality policies made a very poor showing, which probably reflects the little importance attached to OSH issues on the equal opportunities policy agenda.

The European survey on gender dimension in health and safety unearthed a welter of initiatives in different EU countries. 227 activities addressing a wide array of health issues were reported, ranging from research (70% of cases) through prevention schemes to industrial action, etc. The information collected on issues ranging from musculoskeletal disorders to the organization of

working time, and across traditionally male strongholds like the construction industry to female-dominated occupations like nursing and cleaning services, all points to the gender dimension gaining recognition as a material factor in workplace health and safety. Some sectors are

clearly much further on than others in this area: 36% of the reported schemes related to a specific sector. More than one in four were in the health and social services sector (mostly hospital nurses), one in ten related to distribution and retail (chiefly supermarket check-out staff). Not that

many were in industry (under a quarter of identified sectors) and most of these were in the textile, footwear and clothing sectors. The number and range of the schemes reported, however, cannot hide to view the fact that most OSH policies and prevention practice are still framed

on a gender-neutral model - for which, read the standard male worker. So there is a point to looking closely at the roadblocks to a gender perspective of workplace health and safety, which interact in the four key areas surveyed: knowledge production, the policies in place, workplace prevention practices, how workers fight back. To a large extent, these interactions operate as vicious circles: research is not done into areas where change is not wanted, policies are not changed if there are no indicators to raise alarm, practitioners are geared up to deal with traditional risks and do not see the gender dimension as a relevant category.

MoP03:Gender Sensitive Methods in Research on Work and Health

MoP03:1 Gender and Health in Public Health Education – A Topic in Germany?

Frauke Koppelin,

University of Applied Science Oldenburg/Ostfriesland/Wilhelmshafen, Germany

Goal and Background Of This Investigation

The debate concerning the gender mainstreaming-strategy made visible the necessity to analyze the structure and syllabus of the education in Public Health Science. An evolution carried out by the University of Bremen and the Association Women and Health in the North German Research Cooperation in the summer of 1999 relates to these requirements. It asks in what way gender-related structures and issues are addressed in Public Health Science programs.

Material and Methods.

By means of a quantitatively aligned telephone-survey fourteen of sixteen programs of study, chosen according to specific criteria were examined.

Results

Structurally the educational system of Public Health Science is characterized by a high female representation among the students, Noticeable variances regarding the location can be recognised. A close examination of the professors at the respective universities, classified according to gender and position categories, has brought about an overall picture that is framed by the classical maledominated gender hierarchy. The analysis of the curriculum has shown that eight among 14 programs take the topic of gender and health in some way into account (pinpointed in the condition of study, the curriculum itself or specific courses). Yet, in the remaining six programs the issue of gender seems to be of no relevance at all. Neither in the syllabus nor in the schooling praxis in class.

Discussion/Conclusions:

Structurally as well as textually the German Public Health Science in its education does not address the issue of gender in an adequate and sustainable way. Against the background of the ideal of equal opportunities, as it is laid out in the gender- mainstreaming debate, we have to inquire for appropriate solutions. Claims for methods and standards, which relate to gender in a sensitive way in research as wall as in praxis - emphasize this necessity.

MoP03:2 Profiles of Psychological Well-Being in Swedish Women and Men

Petra Lindfors Stockholm University, Sweden

The vast majority of studies within the area of health psychology have come to focus on processes associated with negative aspects of human functioning and contributed to the

understanding of psychological disorder or physical disease. However, by focusing on the negative, there has been a relative neglect of positive psychological phenomena. Consequently, little is known about processes promoting and maintaining positive psychological functioning including psychological well-being and mental health.

By using a Swedish translation of the 84-item version of Ryff's Psychological Well-Being Scales (RPWB) covering autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance the present study aimed at exploring gender and age profiles in psychological well-being in highly educated women and men. In addition, the relationships between psychological well-being, self-rated health and ratings of financial situation were explored. Finally, since this study is the first to report findings on the 84-item version of the Swedish translation of RPWB, psychometric properties of the measure were also investigated. Mean-level analyses of self-ratings from 328 women and men aged 18–49 revealed no significant age differences, either for women or for men, for the six dimensions of RPWB. In accordance with prior findings, significant gender differences emerged for positive relations, but also for purpose in life (p<. 01), with women scoring higher than men. Also, women tended to have higher scores on autonomy. A median-split of total scores on the RPWB was used to obtain two groups with different profiles of psychological well-being. Subsequent mean-level comparisons, performed separately for women and men, revealed significant differences in scores across the six dimensions (p<. 001) for both women and men, thus reflecting the importance of all the separate dimensions of RPWB for higher levels of psychological well-being. Regression analyses were performed for women, men and all participants separately to explore the relationships between demographic factors, self-rated health, and financial situation. In all analyses, the same overall pattern emerged with self-rated health and financial situation as the most important predictors for the six dimensions of RPWB. Psychometric examinations revealed satisfactory internal consistency coefficients and modest interrelationships between different dimensions of RPWB, with self-acceptance having strongest overlap with the other dimensions. In conclusion, the RPWB is considered as a sound measure for further studies on positive aspects of human functioning in women and men.

MoP03:3 Health Indicator Profiles for Women and Men

Karin Nykvist

National Institute for Working Life, Stockholm Sweden

The main issue of interest in the present study is to examine the relationship between different health indicators and self-rated health for women and men when including work environmental factors in the analysis.

The way people assess and evaluate their own health is an important topic in many ways. Measures of self-rated health may be important considered both as a predictor and indicator of morbidity and mortality, as a tool for identifying high risk groups and risk factors and as a measure of general well-being. But it is not completely clear how a person assesses her own health or what dimensions and circumstances are embodied in self-rated health. Self-rated health can be viewed as a proxy for physical health as well as emotional and subjective well-being which may be associated with a large number of factors, such as life events, social networks, family roles, socio-economic status, occupation and work environment factors. There are for example indications that a number of work environment factors predict worsening of self-rated health over time. Considering common findings of women having higher morbidity rates but lower mortality rates than men brings forward the question whether women and men differ in health indicator profiles when considering physical,

ergonomic and psychosocial work environmental factors. The data is based on a regional study where a questionnaire was sent out to a randomly selected sample of 10 000 persons (5000 respondents), from the region Östergötland in Sweden.

A preliminary regression analysis based on 2706 women and 2176 men was performed for self-rated health including musculoskeletal health, physical functioning, mental health, role limitation and social functioning. When analyses separately for men and women, the model explained slightly more of the variance in self-rated health for women (adj. R²=.50) than for men (adj. R²=.45). Physical functioning, pain and sickness showed the strongest relationship with self-rated health for both men and women. The relationship between social functioning and self-rated health was stronger for men than for women, whereas physical functioning showed a slightly stronger relationship with self-rated health for women. The effect of physical functioning and pain on self-rated health was slightly reduced when including ergonomic work factors in the model and the effect of pain was further reduced when including psychosocial work factors in the model. The inclusion of psychosocial work factors also reduced the effect of social functioning and role limitation on self-rated health for both men and women. The more specific relationships between different health indicators and work environmental factors for men and women will be further examined in Lisrel.

MoP03:4 Traditional Practices In The Case Of Ethiopian Somalis

Abdulfatah Abdullah Hassan Ethiopia

The Ethiopian Somali Region (Officially known as Somali National Regional State) is one of the least developed regions in Ethiopia where almost all Socio-Economic activities such as Electricity, Potable Water and Health services are non-existent.

Due to the pastorilist and nomadic way of life, Women are the most marginalized and neglected part of the society. This emanates partially from the long practiced traditions, where women are supposed to do each and every activity of the household chores Women must fetch water every day from a distance of 15 to 20 kms, they should also find fuel wood (Firewood) and at the same time take care after their children and the whole family.

A part from the above-mentioned burdens, they do not have access to education and Health Services. As a result most of the women become vulnerable to all sorts of hardships including poor working conditions, poor health services and inherited or exposed to all transmitted diseases such as TB.

MoP03:5 Reflexology: - Strategy for improving health of working women

Kusam Aggarwal

All India Association Of Accupressure And ReflexologyNew Delhi India

Foot Reflexology is the study and practice of working reflexes in the feet, which correspond to other parts of the body. With the use of special hand and finger techniques reflexology causes relaxation and restores equilibrium and ultimately health. In addition to its therapeutic uses, it can serve as a preventive measure also.

Although its beneficial for everybody but specially good to working women's health. In my regular practice as a reflexologist had a chance to work on various working women of different age groups. Because of double responsibility of house and work they have more stress, strain and

posture problems like Insomnia, B. P. Problems (Hypertension and Hypotension), migraine, general fatigue, Anemia, Hormonal Imbalance, Cervical spondolysis, Lower back pains, Sciatica, Joint pains, etc.

By working on different reflexes on foot, they were helped to get rid of various diseases and many of them got rid of regular medicines they were having, of course by doctor's advice. After the treatment, they found themselves healthy, active and more energetic; which obviously improved the quality and quantity of their work.

When a professional cannot do work upto her capabilities either because of time or health constraints it leads to depression. In reflexology we have treatment for depression as well.

Even Pre menstrual and port menopausal changes are more profound and severe in cases of working women. With this simple and natural therapy they were helped to overcome hot flashes, palpitation, mood swings, fatigue, sweating, headache and various other distressing effects of hormonal changes during this time.

In this therapy we take care of the entire body so emphasis is on wholistic approach which results in complete healthy person.

This is natural, simple and safe therapy and a healthy person can also get it done on and off to remain healthy and fit.

In this context my paper is an attempt to look into the strategies of coping family life and work through better health in a developing economy where woman are faced with new challenges at work.

MoP03:6 Respiratory Risk Assessement among Workers exposed to Molybdenum and Tungsten dusts in Sintering technology

L.M. Stoica¹, A. Cocarla¹, L. Grecu², G. Ivanescu¹

Institute of Public Health, Occupational Health Department, ² University of Medicine &Pharmacy, 3400, Cluj-Napoca, Romania

Tungsten and molybdenum (oxide and metallic dusts) exposure characterize sintered wires production. During the technological process, especially in the presintrering and forging phases, particles less than 5 /um are spread into the environmental air of the work places.

A cross-sectional study was carried out among 158 workers exposed to Mo and W dusts in a sintered wires section and 165 non exposed workers from the same plant. Air dusts concentrations at the work places were determined by gravimetric methods. Workers have undergone a respiratory symptoms questionnaire, clinical examination, ORL examination and lung ventilatory tests (FVC, FEV₁, FEV₁/FVC%, FMF).

Air dust concentrations exceeding MAC values (8 mg/m3 air) were found during the presintering and forging phases. Prevalence of chronic rhinitis (61.9%) and pharyngitis (76.2%) was higher as compared as the control group (33.3%, 39.4%). A mild increase of chronic bronchitis in exposed workers as compared as the control group was present. Statistically significant differences between exposed and non exposed workers were found regarding the mean values of FMF: exposed women, exposed non smokers and workers aged up 40 years had lower values as compared as the same control groups.

The results of this study have showed that occupationally exposure to molybdenum and tungsten dusts in sintering technology represents a risk factor for the respiratory system of these workers.

MoW10: Politics, Legal Systems and Economic Aspects in Relation to Motherhood

MoW10: 2 Job Adjustment. How do Norwegian Employers handle Pregnancy among their Workers?

Nina-M Kristiansen Skalle FAFO institute for applied social science, Töyen, Norge

During the last 30 years, the pattern of work participation among Norwegian women has approached that of men. Full-time work has become more common than part-time work, even among mothers with small children. At the same time, Norway – compared to other European countries – has maintained a relatively high fertility rate. In Norway, about 60 000 birth take place every year, meaning that many pregnant women will be employed during the whole or at least part of their pregnancy. It is a well-known fact that pregnant women have high incidence of sick leave.

Previous research has shown that the sick leave incidence among pregnant workers can be reduced if the women's working conditions are adjusted. If necessary she is placed in a different job. In an extensive survey in 1989 two out of three pregnant Norwegian workers reported they were in need of pregnancy-related job adjustments — only about half of those in need obtained changes (see abstract from Kitty Strand).

In the project "Job adjustment for pregnant workers – how Norwegian employers handle pregnancy among their employees" Fafo Institute for Applied Social Research has conducted both quality case studies and a survey among personnel managers in almost 1100 enterprises in different industries. Among the main questions are:

- How do personnel managers assess their enterprise's possibilities for job adjustment for workers with temporarily reduced work capacity in general and for pregnant workers in particular?
- What has actually been done for pregnant workers?
- To what degree is handling of pregnancy integrated in the enterprise's general and occupational health and safety policies?
- Are there differences between industries on handling pregnancy or are the differences just as large or even larger within industries?
- What kind of organizing and economic freedom of action do different kinds of enterprises have when it comes to temporary job adjustments?
- Which organizing and economic conditions seem to be important/decisive in job adjustment possibilities and again, will we find differences between industries or will the differences be just as large or even larger within industries in matters of freedom of action?
- What is the relationship between possibilities for handling temporary job adjustment and the possibilities for handling worker absence?

Given the gender-segregated Norwegian labor market, the survey sample is drawn from industries that , relatively, employ large groups of women. This means that the results will not be representative for the total Norwegian labor market, but presumably, for the parts of the labor market employing the major female work force. The 11 industries are: homebased services (health sector), hospital services, nursery school, pre-school and compulsory primary and secondary school,

retail trade, hotels and restaurants, hairdressers, food production, social security offices, bank and insurance, and publishers.

The preliminary data analysis show that of the total sample, 910 enterprises have had pregnant workers the last three years. Among these, 35% report no need for job adjustments, 57% made adjustments, 6% say they couldn't make adjustments, while 2% did not know whether there were made adjustments. Of those 460 enterprises reporting they made job adjustments. 276 implemented technical remedial action, 283 gave the pregnant worker other work, 359 let other employees take over the pregnant workers' duties. 274 implemented increased flexibility. In working hours/shift arrangements. 46 postponed work and 49 let the woman perform all or parts of the work at home. The finding that 35% of the employers report no need for adjustments, is remarkably in accordance with the finding from the 1989-survey where one-third of the pregnant women report no need for job adjustments. Further analysis will tell if we will find the same pattern in the different industries

The forthcoming analysis will provide profiles of the groups' (subjectively perceived) freedom of action and actual actions toward pregnant workers (what is the relationship between freedom of action and actual actions in concrete situations). Through comparing profiles across groups(industries) we will clarify whether it is branch-specific or ore general conditions that causes similarities/differences in profiles. At the same time we will examine variance within the groups. Through regression analysis will then examine which factor(s) that best explains/bears most significance on the freedom of action. The variables included in the analyses are work place size, portion of pregnant workers, OSH-resources, risk assessment, working hours arrangements, pay systems, portion of permanent appointments, portion of female workers and unionization.

MoW10: 3 Policies and Practices that support the Integration of Breastfeeding and Maternal Employment

Judith Galtry

Employment and Family Careers Center, Ithaca New York, USA

There is increasing attention paid to various employment-related factors affecting women's reproductive health. However, an important, but often neglected, aspect of discussions on women, work and health relates to the intersection of breastfeeding and maternal employment. In recent decades, there has been an unprecedented rise world-wide in the economic activity of women during their childbearing years. Consequently, maternity protection, including for breastfeeding, represents an increasingly significant issue for labour market and health policy-makers at both the international and national levels.

This paper firstly outlines why breastfeeding represents a critical issue for maternal and child health in both developing and industrialized countries. With reference to the research literature, it then examines the factors, which facilitate and/or impede the intersection of breastfeeding and maternal employment. This is followed by an overview of key international developments affecting maternity protection, including the recent revision of the International Labour Organization's Maternity Protection Convention No. 183 (2000). The paper proceeds to examine the integration of breastfeeding and employment as a human rights issue, with specific reference to the United Nations Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and the United Nations Convention on the Rights of the Child (CRC). It then examines national level policies and practices that affect this integration, focusing specifically on the United States. The implications for public policy within those European countries that increasingly look toward the United States as a model of greater labour market flexibility are also explored. The paper

concludes by examining specific concerns that facing women in developing countries with regard to this intersection and the way in which they can be best addressed by governments, non-governmental organisations and grassroots women's groups.

MoW10: 4 Work Process in Reproductive Health: Updating Medical Ideology in the Care of HIV-Positive Pregnancy

Regina Helena Simões Barbosa University of Rio de Janeiro Karen Giffin National School of Public Health, Fundação Oswaldo Cruz, Brazil

Aims: Since the XVIth century, medical science has been legitimized and institutionalized as the only authentic knowledge. This process has dismissed, among other things, women's knowledge on health care. The emerging scientific paradigm (mechanist, which institutes the "body-machine", and dualist, which splits body and mind) characterizes the dominant medical ideology that has been reinforcing strategies of control over the female body and over reproduction.

To understand the way this ideology is updated, this study focuses on an occupational space in health-care that polarizes important issues related to the reproductive body: HIV+ pregnancy, now the object of medical intervention aimed at reducing mother-to-child transmission. In this case, "saving" the babies becomes the ultimate goal of medical actions; medical ideology reproduces naturalization of the "good mother", and appropriates the right to make reproductive decisions. Assuming that medical ideology acts in all instances of health services – from the segmented, individualized and hierarchical organization of the work process, to the pedagogic-normative relations in clinical practice –this study analyses a service for HIV+ pregnant women in a public hospital in Rio de Janeiro, Brazil. The conceptual focus adopted assumes that medical ideology orientates the positions and behaviors of health professionals in relation to the patients. As social and gender subjects, however, these professionals also experience conflicts and contradictions that may promote transformations.

The study and methodology: Qualitative methodology has been chosen to apprehend the symbolic representations, the meanings and the intentionality of the actions of the professionals that make up the multi-professional team of the program to be studied. Two research techniques were used: participant observation of the daily routine, and in-depth individual interviews with the seven members of the health team. The themes were: gender representations (emphasizing motherhood), related to both their own life experience and to the patients; ethical dilemmas related to HIV+ pregnancy, and critical evaluation of the program, the health service and the health policies regarding HIV/AIDS.

Results: 1) Participant observation revealed manifestations of medical ideology in: work-process segmentation; absence of collective discussion spaces; reproduction of medical power hierarchies; competition between the professional categories and between the medical specialties (obstetrics x virologists); hegemony of the technical drug-therapeutic focus in detriment to the patients' human and social issues; naturalization of the patients' maternal role; discriminatory attitudes toward those who don't fit the "good mother" role; non-recognition of the patients' right to make their reproductive decisions; and lack of attention to the women's own treatment.

Results 2) The interviews revealed that these professionals, mostly women, experience the current gender dilemmas in their own lives and are sensitive to these issues in the patients; they suffer and are emotionally moved with the extreme social needs of the clientele; they manifest a profound critical sense concerning current health policies and deficiencies in public services; they recognize the necessity of integrating the social, affective and familial dimensions in health care,

pointing to the need for integral health care; and they feel the lack of group discussions which would allow them to share their feelings and improve their care-giving.

Conclusions: Although medical ideology remains active at all levels of reproductive health care, there is a potential for transformation that points to integral heath-care in the perspective of sexual and reproductive rights. If group meetings were offered to the health staff, the psycho-social dimensions of health-care would certainly be improved.

MoW11: Politics, Legal Systems and Economic Aspects, Equal Opportunities, Laws and Regulations

MoW11:1 Experience and Perception of South African Women Doctors on Equality and Discrimination

Elsabé Klinck South African Medical Association, Pretoria, South Africa

South Africa has adopted an Employment Equity Act in 1998. It prohibits discrimination on a number of grounds, including sex and gender. It also contains elaborate provisions on the adoption of affirmative action measures in the workplace and the identification of employment barriers. However it appears that the Act has not really being understood by the public at large and many negative perceptions and misunderstanding prevail in relation to it.

Women doctors are not immune to the general effects of discrimination in society and at work. This paper will set out the results of a survey on the experiences and perceptions of women doctors in relation to discrimination, harassment and affirmative action. It will also look a their participation in the setting of employment equity plans and the identification of employment barriers. The applicable legislative provisions will be explained, after which the realisation and integration of these legal aspects in the everyday working life of women doctors will be investigated. An important aspect that will be addressed, are the levels of awareness on the possible routes to bet taken in order to solve issues of discrimination, harassment and employment equity.

From this the greatest stumbling blocks and possible solutions in terms of law, ideology, society, perception, empowerment, etc will be mapped so as to be used as a basis for plans of action for women doctors in South Africa.

MoW11:3 Equality between Men and Women in a Swedish Region

Inga-Britt Drejhammar and Birgit Pingel National Institute of Working Life, Stockholm, Sweden

This project has been carried out in three local governments in one region in Sweden. Interviews have been carried out with key persons and a questionnaire has been distributed to trade and industry companies and the public sector in the region. The aim of the study is to investigate the situation regarding the equality between men and women in the region. Another aim is to put in order a development work within and between the participating organisations. The study has its focus on the divergence between the formal obligations in the Swedish Equal Opportunities Act and the efforts to fulfil its obligations in the contacted workplaces.

Formal perspectives of equality

The Equal Opportunities Act prohibits sex discrimination in the labour market; all employers shall promote equal opportunities for both women and men at the workplace; employers with a minimum of ten employees are required to prepare a plan concerning activities in order to fulfil the requirements of this Act.

Subjective perspectives of equality

One central result of the study, according to the persons participating in the study, was that there are no special problems concerning the equality between the sexes on their own workplace. The problems can however be connected with other organisations at the labour market and in the society as a whole.

Activities in common in the organisations were aimed at the recruitment of women to promote an equal distribution of women and men in a certain type of work or within a certain category of employees. Another activity had its focus on preventing unwanted differences in the wages between the sexes.

Very few answers from the participants concerned acts and interventions that might reduce the differences between the sexes in power and status in the organisations. Changes regarding organisational and structural factors have in a very small extent been carried out in order to eliminate the obstacles that produce and reproduce the discrimination of women.

MoW11:4 The Hindu Widow in India

Shachi Chakravarty Jesus and Mary College, Chanakyapuri, India

The paper aims at studying the social discrimination against the Hindu widow in India. Ever since monogamy was established as a norm in Hindu society, the position of the widow has been vulnerable economically, socially and culturally. A Hindu widow invariably gets marginalized at all levels of existence.

Under the ancient legal codes of conduct for Hindu society, the widow was the family responsibility for her essential maintenance. She was "revered", thought bereft of any social or economic status. Over the centuries the situation worsened due to conformity to caste rules, which imposed the performance of "Sati" or self-immolation on the husband's pyre. The 19th century reformers took up the cause of widow remarriage and extended the age of consent for marriage much against conservative opposition.

Though "Sati" is now legally and socially untenable, forms of exploitation have become more inhuman. Legally though a widow inherits the property of her husband, but the de facto position is very different from the de jure position. The widow is often dispossessed of or denied her property rights and is abandoned to live on social charity. The gender bias against the Hindu widow is more pronounced than those faced by Christian or Muslim women in India. Deprived of her legal or social status the Hindu widow leads a colourless life of chastity and abstinence. She is denied a nutritious diet and her health is the first causality. In the work arena the degree of exploitation is two pronged. On the one hand she suffers economic exploitation while on the other hands she suffers from gender originated biases.

The options for the Hindu widows depend entirely on her caste, class, age and educational levels. The state, society and the NGO do not cater to their needs. Economically exploited and socially marginalized, the Hindu widow often seeks space in the religious townships, Vrindavan in particular. My research is based on the case studies of women in such situations supplemented by archival and literary sources. The need of the hours is to sensitize the government agencies and the society to the fate of the widowed women so as to concentrate efforts for some tangible and effective measures.

MoW12: Physical Exertion

MoW12:1 Physically demanding Work and Physical Capacity among middle aged Women - An 11 -Year Follow-Up

Minna Savinainen (1), Clas-Håkan Nygård (2) and Heikki Arola (3) 1. University of Tampere, Tampere Finland. 2. Tampere School of Public Health. 3. Tampere Occupational Health Center

Aim: The aim of this study is to clarify the changes of physical capacity among middle aged women who work or have worked in physically demanding jobs in the food industry.

Material and Methods: The subjects of this investigation were women who worked in the same food factory in 1989. All together 61 women were examined in 1989 and 2000. Their mean age was 52.2 in 1989 and 62.8 in 2000.

Height and weight were measured and body mass index (BMI) was calculated. Muscular performance capacity was assessed with field tests (static and dynamic upper limbs and trunk extension, dynamic trunk flexion and lower limbs). The aerobic capacity (VO2max) was assessed by a submaximal bicycle ergometer test. The women were divided into physical and mixed physical and mental work group according to their own estimation of their work content. The results were statistically analyzed with a paired 1-test (1989 and 2000 variables) and independent t-test comparing the different groups.

Results: The total range of the decrease was from 0.6 % to 35,5 % and the range of the increase was from 3.6 % to 5.8 % depending on analyzed variables during the follow-up period. Among the women the biggest changes were in the dynamic strength of the upper limbs, in squatting and in aerobic capacity during 11 years. In the physically demanding work group the changes among different variables were statistically significant except the changes in the static strength of the upper limbs and in the dynamic trunk flexion. In mixed mental and physical work group only the change in aerobic capacity (VO2max) was statistically significant (p=.007).

Conclusions: During the follow-up period, the body mass increased and physical capacity decreased. The changes in physical capacity depended on the variables which were considered. The changes were greater in the dynamic strength of the upper limbs and the aerobic capacity than expected. The workers who had physically demanding work had larger changes in physical capacity than the workers in mixed mental and physical work.

In practice this means that the working life has to be individually adjusted to these changes by lowering the physical demands of the work 0.9. by shorter working hours which improve recovery from strenuous work tasks, ergonomically designed work tools and instruments. In addition the worker has to have possibilities to regulate her own work e.g. alter and adjust different work tasks, methods and speed. As the target is that the workers are able to manage in working life, as healthy as possible, until their old-age pension.

MoW12:2 Are the physical demands in work life too high?

Karlqvist $L^{(1)}$, Leijon $O^{(2)}$, Härenstam $A^{(1)}$, Schéele $P^{(2)}$ and the MOA Research Group (1) National Institute for Working Life, Stockholm, Sweden; 2) Division of Occupational Health, Department of Public Health Science, Karolinska Institute, Stockholm, Sweden.

Introduction

Heavy physical load at work is a potential risk factor for many different diseases. The primary aim of this study was to investigate the correspondence between physical demands in work life and the physical capacity of the individual. A secondary aim was to identify working and living conditions and life style factors associated with the excess of metabolic level and the characteristics of the individuals at risk.

Methods

The present study was part of the Swedish MOA study¹. Participants were 203 men and women at 80 work sites in public and private enterprises. Information about external physical activity (intensity, frequency and duration) was obtained by an interview method and translated into TWA-MET². The aerobic power of each individual was measured and maximal oxygen consumption was estimated. Information about work exposures and leisure time activities was obtained by interviews, observations, technical measurements and questionnaires. In the data treatment and analysis gender specific calculations have been used.

Results

During work 27% of the men and 22% of the women exceeded their metabolic level according to the literature. Statistically significant differences were observed between those who exceeded their metabolic level and the remaining subjects regarding: awkward work postures, manual handling, high %HRR³, routine work and little stimulation; men had less time-bound work and women more and women also had less influence on the work situation, less creative work, more hindrances at work and more irregular work hours.

Those who exceeded their metabolic level during paid work were mainly blue-collar workers. Most of these men worked in male dominated occupations and more of these women belonged to the low-education group with low wages. Examination of self-reported health status showed that these women reported poorer general health, worse psychological well-being and more musculoskeletal symptoms than the remaining group. No such differences were seen among the men. They had, however, adverse life style behavour.

Discussion and Conclusions

Twenty-seven percent of the men and twenty-two percent of the women exceeded the recommended metabolic level during work. Work exposures were strongly related to the excess of metabolic level. This was more evident among the women. For men life style factors also played an important role.

¹ Modern work and living conditions for women and men. Development of methods for epidemiological studies.

² Time weighted average MET (multiples of resting oxygen consumption).

³ Heart rate increase in per cent of possible heart rate increase.

This study indicates that physical demands in work life of today are high. This is reflected in a mismatch between the individual's physical capacity and the physical demands of the work for a quarter of the population.

MoW12:3 Constrained standing: a Source of Pain for Women Workers.

Karen Messing, Ève Laperrière, Marie-Christine Thibault, Université du Québec à Montréal, Montreal

Asa Kilbom, ⁾National Institute of Working Life, Sweden

The Québec Health Survey showed that 59% of workers (and 81% of those under 25) work primarily in a standing position. Workers who report that they usually stand at work are much more likely to experience pain in the lower limbs and lower back than those who sit. Pain reports are less common among those who are free to sit at will, and among those who report moving around at work. Thus, the degree of constraint may be a determinant of health problems among standing workers. However, a methodological problem is posed by the fact that workers rarely stand completely still for any length of time, so standing is not easily distinguished from walking. Thus, in epidemiological studies, standing postures have usually included both constrained standing and walking. In our view this confounding of standing postures may obscure a specific relationship between constrained standing or slow ("museum") walking and health problems.

Women who work standing experience more pain in lower limbs and back than do men. This could be due to a difference in working posture, in the degree of constraint (generally higher in women's jobs), or in reactions to working posture.

Objectives: (1) Develop indicators for observation of the degree of constraint among standing workers; (2) Relate the degree of constraint to indicators of discomfort.

Population: 44 researchers, sales and food service workers in Québec and Sweden. food service: 10 women and 2 men; sales: 12 women and 5 men; cashiers: 2 women and 2 men; researchers: 9 women and 2 men.

Methods: Observation of postures at regular intervals during work time: steps per unit time, steps per step sequence, per cent of sequences composed of one or two steps. Registration of pain sensitivity at the plantar surface (algometry) before and after work, observation of strategies used to reduce pain (leaning), recording of pain before and after work on a body map.

Results: Pain sensitivity and number of pain sites increased after work compared to before work among sales and food service workers, who worked standing 60-90% of the time, moving during less than half of that time. No such AM-PM difference was found among researchers, who sat during 95% of the time. In a "slow food" restaurant, there was less pain and less increase in pain sensitivity than in a "fast food" restaurant. Surprisingly, men's pain sensitivity increased significantly more over the work day than women's. In a logistic regression, increase of pain sensitivity during the work day was related significantly to: male sex, younger age, longer foot, higher proportion of short step sequences and less time in a leaning posture.

Conclusions: Unrelieved standing at work, particularly constrained standing, is a source of pain for all workers. There is no support in these data for a hypothesis of increased pain sensitivity among women exposed to the same working posture as men. Thus, the higher level of pain observed among women in the Québec Health Survey cannot yet be attributed to this mechanism.

Future directions: We are continuing this work with the collaboration of women's committees of Québec trade unions in order to find ways to diminish the effects of constrained standing and to limit the time spent in this posture. We intend to observe a wider variety of working postures and to

examine carefully the role of footwear, legwear and floor surfaces. Hypotheses regarding the relationship between gender, pain and working posture will be explored further

MoW12:4 Occupational Physical Exertion During Pregnancy and the Risk of Preterm Delivery and Small-for-Gestational-Age Birth

Lisa Pompeii, David Savitz, and Kelly Evenson, The University of North Carolina at Chapel Hill – The Epidemiology Department in the School of Public Health

Preterm birth (PTB) and small-for-gestational-age (SGA) birth are leading causes of infant mortality and morbidity in the United States (NCHS, 1998). In 1998, almost 11% of all singleton births were preterm. Although researchers have reported that women who work outside the home for pay are at a decreased risk for PTB and SGA when compared to women who do not work, others have found that certain workplace exposures such as lifting and standing may increase a woman's risk. The purpose of our study was to evaluate whether occupational physical exertion during pregnancy was associated with an increased risk of PTB or SGA.

Women who were at least 16 years of age and not pregnant with multiple gestations were recruited into the Pregnancy, Infection, and Nutrition (PIN) Study, a prospective cohort study at UNC, during a prenatal visit between 24 and 29 weeks' gestation. Women were contacted within two weeks of recruitment for a telephone interview and asked to select an adjective (almost always, usually, sometimes, rarely or never) that best described the amount of time spent standing and lifting for the two longest held jobs during pregnancy. They were also asked the number of hours and days worked per week, and if they worked at night. In order to construct a timeline of exposure, women were also asked to provide start and stop dates for both jobs. Lastly, a wide range of demographic and behavioural information was gathered in order to assess for possible confounding in the analysis.

A total of 1,907 women who indicated that they worked at least 28 days during pregnancy were included in the analysis of PTB, and 1,711 were included in the analysis of SGA. Twelve percent (12.3%, n = 234) delivered PTB and 8.3% (n=142) delivered SGA. Crude analyses indicate that women who reported standing almost always at work were at a modest increase (RR 1.3, 95% CI: 0.9, 1.8) for PTB and SGA (RR: 1.6, 95% CI: 1.0, 2.6) when compared to women who reported standing never or rarely; however, this increase was not found for either outcome for women who were exposed during the second trimester. Women who reported lifting at least 25 pounds almost always or usually were 1.4 (95% CI: 1.0, 1.9) times more likely to deliver early or have an infant who was SGA when compared to women who lifted never or rarely; however, this risk decreased to 1.2 (95%CI: 0.8, 1.9) during the second trimester for PTB and decreased to 0.9 (95% CI: 0.7, 1.7) for SGA. Lastly, an increased risk for PTB and SGA were found for women who worked at night, with risk estimates of 1.5 (95% CI: 1.0, 2.5) for both outcomes, during both trimesters.

Crude estimates suggest that women may be at an increased risk of PTB and SGA when exposed to occupational physical exertion during different time periods of pregnancy. Further analyses will allow us to consider exposure measurements that are weighted according to the amount of time spent at work, in addition to considering possible confounding variables.

MoW13: Working and Living Conditions in Different Professions

MoW13: 1 Women Surgeons in Austria – Results of a National Study

End Adelheid, E. Rasky, M Benesch, G Feistritzer, H. Piza-Katzer, University of Vienna, Austria

Introduction: The number of female surgeons in various subspecialties such as general, trauma, plastic, pediatric, cardiothoracic and vascular surgery is steadily increasing in Austria. To investigate working and private living conditions a national survey was performed for the first time in 2000.

Subjects and Methods 351 female surgeons (certified, in training, retired, on maternal leave) could be identified by the database of the Austrian Medical Chamber and the national surgical societies and by phone calls to all hospitals in Austria. A standardized questionnaire included 164 items concerning socico-demographic variables, working conditions, career advancement, surgical training, mental health and family life. The survey was mailed by the Institute of Empirical Social Research (IFES, Vienna) in 12100 with one reminder in 2101; the study was closed in 5101. The response rate was 58.7 % (2061351). Correlation and regression analyses to determine variables influencing general satisfaction as dependent variable were performed.

Results: The quality of a department's organization significantly influenced general satisfaction of female surgeons. Other putative prognostic factors such as age, type of hospital, federal state of Austria, surgical subspecialty and private partner did not enter the regression model. Personal comments to open-ended questions are also reported.

Discussion: Although there is a high degree of satisfaction with the choice of the profession, women surgeons in Austria frankly addressed several issues of concern they are dissatisfied with: the most significant ones are poor organizational structures of departments. In accordance with the Anglo-American and Scandinavian literature the importance of having a powerful mentor is stressed as well as the need of our society to change its attitude against minorities like women in surgery.

MoW13: 2 Level of job satisfaction of hospital nurses belonging to the province of Concepcion, Chile

Beatriz Femandez University of Concepcion, Chile

The present research is a qualitative, descriptive, prospective and correctional study, of which the main object was to determine the job satisfaction level of the nurses working both in the public and the private hospitals in the province of Concepcion, Chile. The hypothesis proposed was that nurses working in private elinies presented a higher job satisfaction lever than those belonging to public hospitals. The sample used for this investigation consisted in 248 nurses, 147 from the public quarter which corresponds to 40% of this population and 101 originating from the private sector, which corresponds to practically 100% of the nurses of this group. It was used the following 4 instruments to this aini; first of all, the author draws together information about different biosociodemographic variables which could relate to the level of job satisfaction. It also applied the

Smith et al seale to obtain data applicable to the activity, supervision, peers, salary and promotions and also a Bolda subseale which points labor conditions. Finally, it was prepared some questions about life satisfaction and the preference choosed by this professional took when it applied to University.

The results showed a significant difference between the nurses working in public and in privates hospitals as regards level of job satisfaction in general and in certain factors related to their work, Furthermore, it enabled us to come upon a diagnosis of the general job satisfaction revel of all nurses living in the province, both in public and private practice and their relation with the career ebosen when entering University.

MoW13: 3 'The indefatigable miss Hofman' - Working Conditions in the Scandinavian Entertainment Business 1900

Marika V. Lagercrantz National Institute of Workig Life, Norrköping, Sweden

Anna Hofmann was a well-known singer, variety manager and filmdirector in Sweden 1892-1912. During her long career she also gave birth to six children to whom she was the main provider. She became a very popular profile to the Stockholm public and was often interviewed in the press. A cluster of ephitets was almost often used in these articles to describe her to the public: The energetic, indestructible and indefatigable Miss Hofmann'.

What was it that, in the eye of the Swedish journalists, had *not* fatigued Anna Hofmann? Was it the years she toured all over Europe and Scandinavia as a variety singer? Did they think about all the dangers that would meet a single woman travelling long distances to foreign cities and countries? Or did they think about the conditions at the cold variety halls, the noise and the intoxicated, smoky air? Or about the sexual harassment's from the large, predominantly male and often heavily drunk audience, from male colleagues or managers at the halls?

In this paper I will discuss issues of gender and health in the entertainment business around 1900. With the career of Anna Hofmann as a point of departure I will also consider the working conditions of female artist in the modern theatre world.

MoW13: 4 Gender and burn-out among physicians

Y Winants

University of Maastricht, the Nederlands

A large number of data have shown that 25-30% of health care professionals develop burnout as a consequence of their activity in clinical settings (Grassi & Magnani, 2000) As risk factors for burnout are mentioned institutional variables (e.g. workload, organizational defects team conflicts) and contextual variables (e.g. dealing with difficult patients death and dying issue, unrealistic expectations on the part of the patients families) representing the major sources of stress. Individual psychosocial characteristics and coping mechanisms have also been shown to influence vulnerability to burnout among physicians.

The work environment offers few supports for women physicians. Women often feel that they have too much to do, with not enough resources and authority, leading to stress and burnout. (Gautam, 2001) It seems that it is not being female per se, which is the risk factor, but being female in particular jobs, namely medicine and management, where the culture and hierarchies may have

more adverse impact on women than men. Female consultants do report greater job stress from the organizational structure and climate than male counterparts. (Graham & Ramirez, 1997)

In our research project we try to find out if 1) female physicians perceive less control than male physicians regarding a variety of daily work activities, controlling for age and work hours. In addition, if control of workplace issues is related to risk of burnout more for women then for men. By means of in depth-interviews and questionnaires in a sample of general practitioners and clinical consultants we will examine the following hypothesis:

Greater burnout in female physicians is a result from structured but implicitly different gender-related work expectations that come from a variety of sources, such as patients, physician colleagues administrators or non-physicians co-workers. These expectations may work in such a ways as to be built into the job of being a women doctor. In effect the extra stress arises from the greater time and effort being expected of them to communicate with patients and to address psychosocial and health maintenance issues, rather than or in addition to issues related to family-work conflicts.

MoW13: 5 Training effects and subjective evaluation of the performance of female fire-fighter candidates

Désirée Gavhed, Margareta Torgén, Åsa Kilbom National Institute for Working Life, Stockholm

Introduction: Few women are appointed at the fire and rescue services due to lower rating of performance in a number of physical and practical recruitment tests than most male candidates.

Aim: The aim of the study was to evaluate the effects of training practical tasks performed by female fire-fighter recruits. In addition, the relationship between the performance of work-related tasks and the evaluation of the practical performance at service in the fire brigade was investigated. service of each candidate at the end of the project.

Results: The subjects improved their time by about 30 % in the tests requiring technical skill, endurance and strength and got better skill scores. This suggests in general that women may need more preparation before recruitment testing to be able to fulfill the requirements needed. Many of the tested skills will probably improve further with time. At the end of the project year, all except one passed the muscle strength tests for the Stockholm fire brigade and all were considered by the foremen to be suitable to work as fire-fighters. Ratings of performance by the instructors during physical testing were poorly correlated with evaluations of job performance by the foremen at the fire fighting stations.

Conclusions: Fire fighter candidates should be well informed in advance about the physical and technical demands of the fire and rescue service to be able to practice specific tasks used in the recruitment test battery. These measures taken would enhance the possibilities for women to enter the fire and rescue services. In addition, practical tests for recruitment should be validated with regard to the demands of the fire and rescue work.

MoW14: Gender Sensitive Theories and Methods in Research – Gender Bias

MoW14:1 Problem based Interventions a Method for Improving Health

Kerstin Ekberg Linköping University

Musculoskeletal disorders, in particular those affecting the back, neck and shoulders cause the largest consumption of health care resources in the Western world and decrease quality of life considerably for in particular women. During the last years another syndrome, burnout, has become increasingly frequent and contributes to the large numbers of people on long term sick leaves. Few studies have demonstrated successful intervention for these health disorders.

A general problem in most rehabilitation and intervention programmes appears to be the absence of participative approach. In organisational psychology participative models have been demonstrated to improve work motivation and productivity. Control or influence, in addition to social support, prevent stress related disorders. It has also been suggested that a work situation inducing high strain may inhibit learning as a result of accumulated anxiety.

Rehabilitation and successful intervention involves new learning, as rehabilitation and intervention always implies changes. Such change processes may involve the individual herself, her life situation and her work situation, but in particular the interplay between these spheres. In particular for women a number of studies indicate conflicts between the different spheres of life.

In a problem based model for rehabilitation it is assumed that the best expert on how the rehabilitation process should proceed and which goals for rehabilitation should be given priority in the short and long run. By using a problem-based method, which essentially is a pedagogic method, the advantages of a high degree of individual control and influence, of individually adjusted demands and of extensive social support can be utilised. These aspects are important, but not always sufficient prerequisites, to enable a successful process of improving health and quality of life for women. In addition, proper health management at the work place, social support and strategies to facilitate re-entrance at the work place appear to diminish the risk of relapse. In our rehabilitation programmes the supervisors of women with work related disorders therefore also are enrolled in problem-based groups to create an arena for development of the supervisor role.

The theoretical basis for the method and results from studies on rehabilitation of stress-related disorder and individuals on long term sick leave respectively will be presented. Evaluation and assessments have been made with qualitative and quantitative methods. In general it appears as the method has a high face validity for participating women and fits well as a tool for successful change processes.

MoW14:2 The double importance of participation in women's network – A qualitative study of local initiatives from a gendered health perspective

Susanne Gustafsson-Larsson, Anne Hammarström University of Umeå

During the last decade a grass-roots movement has developed in the inland area of northern Sweden with the creation of women's networks. The network-women are involved in a wide range of activities, developed from the needs of the local community, such as child-care or care for the elderly and the creation of job opportunities, meeting places for women as well as opportunities for competence development. These network activities could be understood as a reaction on structural changes in Sweden, where job-opportunities, especially in relation to the public sector are reduced. The new public health with roots in Ottawa charter is based on a positive health perspective and uses a multilevel health strategy in health promotion and disease prevention. Community participation is one of the cornerstones in the philosophy of the new public health. The relational accounts of gender emphasize that we are dealing with structures of social relations of importance. How gender is given meaning to the network women's efforts and how it is interrelated with the women's health perceptions could be studied as acts of negotiations. The concept of power is understood as a relational and discursive concept, which is constructed in all kind of relations.

The aim with this study was to analyse the importance of participation in the women's network using a gendered health perspective. What meaning did the network-participants interactions with each other and with women and men in/at the village, municipality and regional level have for how the network-women perceived their health? How was the interaction understood and described by the network-women themselves?

A qualitative methodology was used. The study was based on two focus-group discussions with intensity sampling of the networks in relation to network activity. Seven networks were invited to choose a woman to represent the network. In the focus-group discussions, the following themes were focused: obstacles and opportunities in networking, opportunities to influence, health and strategies for social change. Grounded Theory was used to analyse data.

The main finding was a two-fold meaning of participation in women's networking. Two main categories were "a room of one-selves" and "vulnerable circumstances". The main category "a room of one-selves" has first of all been interpreted from its metaphorical meaning. In relation to the women's everyday duties and demands, the network implies a room of one-selves, which contribute to that the women can deal with social practice in new ways. A room for one-self together with social support, a joint force and room for reflexivity as well as room of action could be health promotive. The second main category vulnerable circumstances, was related to political and structural effects that the networks met. Vulnerable circumstances as well as, to live in a depopulated area, subsidy-dependency, voluntary work, a risk for burn out as well as backlash could be ill health mediating consequences of the women's network.

MoW14:3 Occupational health research in India: is gender an issue?

Garimella Surekha New Dehli, India

The paper aims to critically analyse available literature on women/men's health in relation to work. Data that illuminates the inter-linkages between one's gender (biological and social) and health is still scarce and biomedical research methods and interpretations of disease and illness frequently overlook the social origins and gender dimensions of ill health of the workers and consequently underestimate its true dimensions.

The succeeding review will reveal that there are acknowledged linkages between one's gender, work and their health but the understanding of how these areas interrelate is less clear. The paper also highlights the areas that have received attention and those that have not. While much of the literature provides only exploratory information, it still opens up the possibility of charting out areas and issues that need to be studied or understood using a gender- sensitive, social determinant framework.

Materials reviewed include Research Studies, National level data (if any), unpublished papers, books, reports and newspaper articles.

The paper summarizes and analyses information available on gender, work and health, identifies determinants and consequences of one's gender and work on their health and reiterates that research strengthens our understanding and provides many a time the re-orientation that is very much required in the still largely unexplored area of gender - work - and their health.

MoW14:4 Nr 077 Gender insensitive Working Conditions in Industryi in Developing Countries

Sylvia K. Gitonga

Directorate of occupational health and safety service, Nairobi Kenya

Background Information: The majority of women in industry in most developing countries are engaged in untechnical work such as packing, sorting out articles. sealing packed goods, etc. Most of such jobs involves repetitive work, lifting heavy weights etc, and speed is an essential element.

For one to effectively cope with this, the worker is required to perform the job while standing. The efficiency is closely, tied to the output in terms of quantities. In most cases, the payment is done on piece work basis to encourage maximum production, certainly at the expense of the health of the worker. Majority of these workers are employed as casuals, and the 'take home package" is very minimal. This would barely enable, them to; engage house helps, at home and are therefore forced, to sleep late at night and wake up very early so at to cope with house duties.

There is an urgent need to address these special needs of women and improve working conditions to create a more comfortable environment, which would in turn help them to stay healthy and productive. Good ergonomics goes hand in hand with this.

The paper will discuss,

- 1. The targeted areas of the survey.
- 2. Methodology.
- 3. Findings.
- 4. Applicable strategies for future improvement of. women's working conditions.

MoW14:5 Gender Bias and Gender Sensitivity in Work and Health Practise in Central Asia

Zamira Akbagysheva Women's Congress of Kyrgyzstan

Women's social protection is the focus of equality between women and men. The general problem is unemployment, where inequality is increasing at a fast page. The aforementioned facts are corroborated by the following unemployment statistics:

There are 20% more unemployed women than men; The unemployment rate among women is 50%;67% of displace (fired) employees are women

It is worth noting the role women's non-governmental organizations play alleviating this problem. They assist women who wish to become self-employed by aiding them in developing business plans, receiving grants, and credits from international donor organisation.

The reason for unemployment is staff reduction which resulted from idle ore closed factories. Taking into consideration the facts of the first half-year of 1999, 50% of the industrial enterprise departments and workshops were functioning. The shaky position of the industrial state has increased the ranks of the unemployed by 19.000 people which is 2.3 times ore than the same period in 1998 (8.000). According to information received in October 1999, the municipal and regional population-employed services had registered 10.000 unemployed women which is 3.6 times more than October of 1998.

60% of the unemployed population is comprised of women, this includes 40% of the women who lost their jobs through reduction, the remaining 20% is comprise of women who have less of finding a job due to their inability to work. The total rate of unemployment among men is 27% and this is made up of mostly rural youth.

The next great problem of facing Central Asia is the increasing of single mothers with many children. They deal with unemployment and poverty on a daily basis. Currently, there are 150.000 such cases. Thirdly, with this period of transformation has come a sense of confusion and helplessness for women which are the result of their strong sense of responsibility to their family and children. The unemployment of married couples with children is a major reason for the worsening of health and confidence of women in future.

Sociological surveys poor women uncovered the following information:

To them the problems of poverty are reflected as food shortage (72.3%); other needs (10.8%), homelessness (3.8%); lack of livestock (3.1%); other wants (5.0%). 40.5% of surveyed women stated that the shortage of family income has not allowed them to purchase food; 40% pointed the lack of family budget for buying other needs. So, poverty is characterized in its lowest rating because there is nothing worse than the shortage of food products. According to women, the family welfare conditions are ranked by the following categories: extremely poor -43.8%, very difficult -47.8%, better than the average poor family -6.1%. Finally, most women face great stress resulting from the above-mentioned statistics.

Troubling problems facing women resulting from poverty are the following: providing food for children (23.8%), high unstable prices for food products (19.9%), single mothers (17.1%), unemployed married couples (12.6%) but in the opinion of most women the main reason of poverty in Kyrgyzstan are the transition to the market economy (42.8%) and the disintegration of USSR (25.8%).

The population who live in poverty is provided with aid. It is interesting to know the ways which poor women receive financial: rely on themselves (41.0%), on government (18.5%), on family members (16.4%) on relatives (24.4%), on coworkers (3.4%) and other (1.1%).

To the phrase "have you any sources of getting aid?" the following responses were given: "only myself" 45.9%, "parents", "relatives" 24.4 %, "government" 17.1%.

So, the change in women's view of poverty is reflected in their selfmobilisation, which gives some hope for the future. However, still some are going on government aid, which is not good. Women's optimism is brightly expressed in their plans to bring their family out of this stressful situation. Most women believe they must learn about another profession. They believe it is necessary to understand the new market economy which prevail in Kyrgyzstan today. In particular, they feel it is important to understand how to operate a small business and the concepts of marketing. An example of this self-mobilization manifest itself in the action of women gaining agricultural credit to increase the production from their fields. Most women refuse to stand by and be idle. All there women needed was to recognize their situation and determine a way out of it with dignity and honesty.

MoS12: Work and Life Maintenance. Feminine "Polyvalence"

Chair: Anne Thebaud-Mony

MoS12.1 Organisation of Work and Women's Health: a Secondary Analysis of the third European Survey about Work Conditions and Occupational Health

Anne Thebaud-Mony Université, Paris, France

The social division of work is managing different places for men and women in the "formal" job market. In the ten last years, a lot of studies pointed out bad health effects of employment precariousness. But very few researches emphasised the organisation of work by itself and its conditions and occupational health conditions of work in Europe (conducted by the European Foundation for Bettering Work and Life Conditions, Dublin, 2000) are the following: for European workers, work conditions and occupational health are worsening in the last ten years. A secondary analysis emphasised on what types of work organisation are met, respectively, in women and men's jobs. Doing this analysis, we tried to study what are the characteristics of women's jobs and the relation with health. We observed that they are the most exposed to "servitude" jobs and flexibility which let them without any latitude to negotiate work conditions and time constrains in relation to prevent health adverse effects. They are exposed to physical attacks, to different kinds of "hypersollicitation" – muscular, nervous and psychological and are also assaulted in their dignity and self-esteem. A French historian researcher, Alain Cottereau, had pointed out two occupational health-wearing models (in French: "usure au travail") between men and women workers at the end of the 19th century. A masculine one is more related to insalubrities (physical and chemical hazards). The feminine one is characterised by overworking. Analysing the European survey results, this paper aimed to show how such models are going on more than one hundred years later. But for women, overworking and occupational health wearing are worsened by the feminine "polyvalence" which means exposure to a very large range of physical and psychological occupational hazards. We want also to underline that the European survey has pointed out another result, that is the lack of tasks share between and women in the family life. That means even more a women polyvalence in order to maintain the everyday life in EU countries

MoS12.2 Women in Post-Crisis Transformation

Meredeth Turshen Ruthgers University New Jersey USA

In this paper we review what we have learned about what women do in the aftermath of crisis. Crises such as war and armed conflict are often accompanied by famine and epidemics of disease in Africa. Because women are rarely represented at peace discussions, their needs are almost never taken into account during treaty negotiations. Thus in the economic, social and political crises of

war-torn societies, women find few programmes or services to meet their needs. Their first challenge is to find shelter. If they have been displaced, they must decide whether it is safe to return home (and if they are refugees, international or national authorities may make this decision for them). Their second challenge is to reunite their families, but many women will find themselves widowed by war. Their third challenge is to find a means of supporting themselves and their children and, depending on their age, of sending their children to school.

Many women have found new resourcefulness in themselves during war and armed conflict, which forced them into independent activities that were not necessary or not socially sanctioned before the crisis. If they were partisans of fighters, they will have learned new skills like truck driving and the use of weapons, or spying and smuggling. If they were abandoned by their husbands, they will have learned to navigate the dangerous terrain of public life, engaging in commerce or working for wages of payment in kind. Many women found strength in their new was of relating to the world and they do not want to return to the restrictions of pre-conflict gender roles.

In the post-crisis transformation of their country, women confront a still-militarised and violent society, the ubiquity of land mines, and the threat of disease epidemics, now including AIDS. If they were on the side of the vanquished, they face the loss of property and personal possessions, and they may be much poorer than before. Politically, their status may have changed; their nationality, the relative power of their identity group, and their position in their community (as widows or as wives in newly polygamous households) may be different. Socially, they must contend with the demands of male relatives and especially of the older generation for their return to pre-crisis gender roles. Their productive work will be essential toRe-establishing the family and they may face great pressure to bear more children. The military crisis may have abated, but women face new levels of domestic crisis in the aftermath.

MoS12.3 Women's Work for Family Health: The Case of Asbestoses Disease

Lucilia Scavone Universidade do Estado de São Paulo Brasil

The objective of this communication is to reflect on women's work for the health of the family. As in the case of housework, the work of maintaining family health remains socially invisible. The work of maintaining life reveals one aspect of women's multifarious knowledge: the health care women give in the privacy of the family. Cresson (1991) has defined this activity as lay health care, which consists of unpaid health care given at home. Strauss et. al. (1985) designate it as "affective work". The fact that this activity falls within the realm of family relationships makes it difficult to recognise as work. In general, housework does not usually receive any particular social recognition. The case of care giving is even more difficult to recognise because it concerns life, death, and love very directly. This work is a dimension of the sexual division of labour in the family and in society: according to Kergoat (1996) it is based on the social relations of sex and gender.

In our comparative research on asbestosis and its consequences for families and society in France and Brazil (Thébaud-Mony, Scavone, Giannasi, INSERM/CNPq, 1997), we noted the invisibility of the health care given by women to their partners with occupational illnesses linked to exposure to asbestos (the cancer-causing mineral that Brazil produces and "consumes" in large quantities). It is women who assume the responsibility for seeking treatment. It is women who establish contact with doctors and hospitals. It is women who support and manage the family. We also noted that the family accumulates lay knowledge of the characteristics, symptoms and treatment of the illness:

coughing, the sensation of lacking air, water on the lungs, intense pain, reactions to chemotherapy and surgery, and the need for medication to reduce pain. Women's knowledge of managing illness in the family is acquired in the daily experience of care-giving, as in applying medical treatment or administering family care.

Occupational illnesses appear far from the workplace where they have been contracted; very often they show up at home, in the case of illnesses linked to asbestos, lay health care practised by women exposes the lack of employer responsibility and the failure of the state to recognise, prevent and treat occupational illnesses. Once more, women are assuming the difficult task of giving continuity to life, a job that is not socially recognised.

MoS12.4 Some Issues raised by the Status of Prostitution

Maria de Koninck

Université Laval et Centre de Coopération internationale en santé et développemen, tQuébec

The recognition of prostitution as a job like any other, or even as work, raises issues, which must be identified and discussed. On the one hand, it may be helpful to protect sex "workers" and better their "working" conditions. For example, relations with police may be less adversarial, having a worker status can help protect against violent clients and the use of health services and follow-up are facilitated. On the other hand, this strategy may also have adverse effects. In the case of West Africa, one can think that there are advantages to being recognized as a official "sex worker", particularly when it comes to health services, but things are much more complex. First there is the definition of prostitution. Poverty brings many women to prostitution in order to survive and fee their families, they do not consider themselves as prostitutes since selling their sexual services is a means of survival and is occasional. Second, there is the entry into prostitution through clandestine practices and the poorest women who can hardly be reached are the ones most exposed. Third, there is the growing number of young girls entering prostitution. This phenomenon speaks volumes about the lack of alternatives for earning a living and the lack of respect of minors on the part of older men. And it raises the following question. Does the "normalization" of prostitution which comes with the status of "sex workers" contribute to the "normalization" of sex abuse of minors and their entry into prostitution? What solutions can be explored to insure the safety of women who sell their sexual services, while denouncing the poverty and the need to survive that drives them to prostitution. Moreover, how can the use of young women (and girls) be condemned while trying to bring about more respect for sex workers?

MoS13: Men and Women. Different Conditions at Work and at Home

Chair: Bengt Westerberg

MoS13: 1Men and Women – Different conditions at work and at home

Bengt Westerberg Stockholm, Sweden

Conditions for men and especially for women in Sweden have changed dramatically since the 1960's. In the beginning of that decade the situation in Sweden was not different from other comparable countries. Through the following decades things changed and Sweden came to be regarded as one of the most equal countries regarding men and women. Internationally especially the number of women in the Swedish government and parliaments, on the national, regional and local levels, has been noticed. In the Swedish government the number of male and female ministers are equal. Women's employment is almost the same as men's. The rate of unemployment was during the recession of the 1990's higher for men than for women. An parental insurance replaced the former maternal insurance already in 1974. In 1995 Sweden was second to Norway to introduce a father's quota in the insurance. And the fathers' share of the leave has gradually increased and amounts in the beginning if the new century to about 12 per cent.

Regardless of this progress regarding equality we must admit that the goals of the Swedish government have so far not been reached. Still, many differences between men and women prevail in the Swedish society. There are many theories about the explanations of these shortcomings. The aim of this seminar is to present at least some pieces of the jigsaw giving us the answer. Hopefully the results presented at this seminar will help to understand why Sweden, regardless of ambiguous political support, has not managed to reach the political goals. The formally equal conditions for men and women do not correspond to quite equal conditions in real life.

MoS13: 2 Time consumption in Swedish house-holds

Klas Rydenstam, Statistics, Sweden SCB, Stockholm

I have on behalf of Statistics Sweden accomplished studies of time consumption in Swedish households. The latest was published in the beginning of the 1990's but a new one is currently carried through. The 1990 study showed that on the whole, the working conditions of women and men differ significantly. When the day at work is over, women, who usually take the main responsibility for the housework, have a second shift of unpaid work to take on. Men are more readily looking forward to an evening off duty. The development since the beginning of the 90's will be discussed. The current study is harmonised with the corresponding surveys in a considerable number of European countries.

MoS13: 3 Parental Insurance

Philip Hwang University of Goteborg , Sweden

As mentioned above the Swedish parental insurance was introduced almost 30 years ago. Since then it has been a goal of Swedish equality policy to increase the leave used by fathers. Substantial progress has been made towards men sharing the responsibilities of parenthood and taking advantage of the government-mandated family leave benefits, but men's share is still much lower than women's. The change has been slowest in the private corporations. I have studied the situation and attitudes in 200 private corporations in order to describe and analyze quantitative and qualitative aspects on the changing role of fathers. More specifically, he will describe how the culture of these work organizations influences men's participation in child care, especially their use of family leave benefits. The emphasis is on understanding the forces within companies that inhibit or facilitate father's taking on more active responsibility for children.

MoS13: 4 Work, career and family

Gunnar Andersson Lund University, Sweden

I have studied the interrelations between work, career and family. He emphasises the gendered and contextual nature of these interrelations. There are special difficulties in combining everyday life and career. The total time availability required implies that a career not only take up most of one's time, but take precedence over everything else.

This mode of operating in career positions has been organised by men for men, because traditionelly it was a male sphere of influence. The career concept reflects men's traditional relation to working life: with a particular timetable and separation between the spheres of family and paid work. This timetable is taken for granted (and almost seen as natural). Characteristic of it is that a work career starts and takes off during the same stage in an individual's life-cycle when s/he is starting a family. In the presentation at the congress, career, time-tables and family life for businesswomen and men will be discussed. The discussion will be illustrated by empirical research results on business top leaders in 26 countries. Those results focuses on businesswomen and men i Sweden, Scandinavia, North/Western Europe, Southern Europe and the US. Unforunately, I have been prevented to come to the conference but his paper will be presented by Bengt Westerberg.

MoS15: Women and Sickness, Absence/Disability Pension, 2

Chair: Kristina Alexandersson

MoS15: 1Disability: The Discriminatory Gender And Cultural Issues Facing Women In Their Return To Work Following Injury/Illness

E. Lyle Gross Mayo Clinic ,Rochester, USA

The following study examined gender and culture issues negatively impacting women who return to work following loss time claims through injury or illness.

Our "system" has adopted a legal test (policy) to address return to work following pregnancy and maternity leave. While this is a viable and clearly non "illness" related time loss claim, we have failed to accommodate women appropriately in their return to work when loss is related to other medical causes.

A retrospective sample of 300 injured workers with an equal balance of men and women were examined for their disability profile including gender, age education, type of injury or illness, cultural background, regional economic barriers, linguistic and other skills. Results indicate that gender is a major discriminating feature when considering return to work policy. There were fewer vocational options available to women and when gender culture, language skills, and transferable skills were examined, women were clearly disadvantaged.

MoS15: 2 Gender's influence on the rates of absenteeism due to medical license for caring sick relatives in Brazil

Anadergh Barbosa-Branco Universidade De Brasilia

Objective: to evaluate the influence of gender on the absenteeism rates due to medical licenses given to accompany or to assist relatives who are sick at a governmental legislative institution in Brasilia.

Method: all the medical licenses given to public workers during 5 years in order to assist sick relatives were evaluated. Absenteeism rates were estimated according to the following variables: gender, age, marital status, number of person depending on the worker, educational level, family relationship to the sick relative, license duration.

Results: 267 licenses were given in the period accounting for 1112 days lost to work. Women were responsible for 65.2% of such licenses. Those rates were 3.8% among divorced men and 16% among married men. The same rates were 15.6% among single women, and 33.3% among widows. Among both men and women, absenteeism rates were inversely related to educational level. Regardless of the number of people depending on the worker, absenteeism rate were at least two-fold among women (5.8%-19%) while it varied from 0% to 5,9% among men. Women

accompanied their siblings in 79.5% of licenses and husbands in 7,8%. Men accompanied wives in 50% on licenses and siblings in 31.1%.

Conclusion: In spite of the fact of the similarities between the professional and salary level among workers, most of responsibility of accompanying sick relatives lays on women. This fact collaborates to increase stress and role conflicts.

MoS15: 3 Gender differences in long term sickness absence: how health influences the process

Angelique de Rijk, Brigitte van Lierop, Nathalie Janssen, Frans Nijhuis, Maastricht University; The Netherlands

Background: In The Netherlands, working women are 2-3 times more at risk for one year sickness absence than working men. This leads to increasing numbers of disability pensions for women. The role of health related factors has only scarcely been studied.

Aim: Aim is to find out what role health-related factors play in the explanation of gender differences in one year sickness absence. Included are the type of health problems, chronic diseases, subjective health judgements, and health related judgements of occupational physician, general practitioner, chief, partner and significant other.

Methods: 119 Dutch working men (n=65) and women (n=54) (mean age = 42, SD 10) who were absent for more than one month, were bimonthly interviewed during one year (2000-2001). They worked 33,6 hrs per week (sd 7,2) on average. They were recruited from varying occupational health services and were working in different types of organisations in different geographical regions. Only respondents with (according to their occupational physician) psychological or musculoskeletal complaints were selected. Health indicators and work characteristics (autonomy, psychological demands, commitment, physical demands, satisfaction) did not differ between men and women at the initial stage. Their occupational physician, general practitioner, chief, partner and significant other were interviewed twice.

It has been agreed with the Ministry of Social Affairs and Work, who commissioned the study, that results of this study will not be published before December 2001. Gender differences in return to work after one year and results on the role of health in relation to this will be presented. Also the role of occupational physician, general practitioner, chief, partner and significant other in relation to the employee's health will be presented. Implications for the practice of occupational health services and companies and for policy will be discussed.

MoS15: 4 The effect of attitudes, social support and self-efficacy on return to work after sickness absence for women

Brigitte van Lierop; Angelique de Rijk; Nathalie Janssen,; Frans Nijhuis, Maastricht University, , The Netherlands

In the Netherlands, working women are more at risk for long term absence than working men. Gender differences in attitudes towards work, perceived social support and self-efficacy are supposed to be involved.

In former studies a relationship between specific behaviour and attitude, social support and self-efficacy has been proved and translated in the ASE-model. The ASE-model presumes that specific behaviour, in this study 'return to work', can be predicted by the personal attitude towards returning

to work, the perceived social norm towards returning to work and the self efficacy of the person concerning return to work.

Also former studies indicate a stronger importance of work for men compared to women and a stronger support for men to return to work compared to women.

Aim of this study is to find out whether gender differences in attitudes towards work, perceived social support and self efficacy are of influence on return to work for 'women on sickleave'.

Methods: In this study 119 Dutch working men and women, working in four different branches, who were absent for more than one month, were bimonthly interviewed during one year. The questions were based on the ASE-model.

Results: The preliminary results are promising, but cannot be presented yet. It has been agreed with the Ministry of Social Affairs and Work, who commissioned the study, that results of this study will not be published before December 2001.

MoP04 Working, Living Conditions and Health

MoP04: 1 Exercise Training for Prevention of Cardiovascular Effects among Women Professionally Exposed to Industrial Noise

Jovica Jovanovic Assistant professor Institute of Occupational Health "Nis" Vojislava Ilica bb Nis

The examination included 938 women in textile industry. The exposed group consisted of 603 women occupationally exposed to industrial noise intensity from 95 to 100 dBA. The control group included 335 women worked in relatively calmer section. The workers of exposed group were divided into two equivalent subgroups (regarding cardiovascular risk factors), by self-selection assignment of workers. The workers of subgroup A were taking part in permanent programme of recreation (30 minutes per day, three times at week during two months). The workers of subgroup B were not taking part in any exercise training. The cardiovascular measurements were performed before and after the exercise training.

The prevalence of hypertension, coronary disease, diabetes mellitus, hypertrygliceridaemmia and hypercholesterolaemia were significantly higher among workers in the exposed group than in the control group. The women of the exposed group had significantly higher values of blood pressure, myocardial oxygen consumption and increased myocardial contractility after the work than before work, which was not the case for workers in the control group.

The prevalence of hypertension, coronary disease, diabetes mellitus, hypercholesterolaemia and hypertrygliceridemia was significantly higher in subgroup B than in subgroup A. The workers of subgroup B had significantly higher values of blood pressure, myocardial oxygen consumption and increased myocardial contractility after the work than before work, which was not the case in subgroup A. The workers of subgroup B also had significantly higher values of serum LDL and triglycerides than the workers of subgroup A.

These results indicate that industrial noise has harmful effects on women's cardiovascular system, but that permanent exercise training has significant effects on prevention of these changes.

MoP04: 2 Women's health in different sectors and occupations

Erika Zoike BKK Bundesverband, Essen, FRG

The Federal Association of Company Health Insurance Funds publishes annual health reports including differences between branches since 25 years. Since 1993 this monitoring has been more and more completed with gender aspects in occupational health respectively morbidity.

The data basis are more then 4,7 million cases of inability to work of nearly 4,5 million active members of all company health insurance funds with the information about type of disease, gender, age, region, sector and occupation.

Although women in general don't have more sickness days than men, they suffer under different types of diseases. Specially the psychiatric diseases increased enormously in Germany from only 2,5 % of all sickness days to actually more than 6 % (women: 7,7 %). The most concerned groups are nurses, cleaning women and above all the unemployed women.

The most frequent types of diseases still are the musculo-skeletal diseases, but they have decreased since 2 - 3 years in Germany. Nevertheless these kinds of illnesses still are striking health problems for workers or letter carriers for example.

MoP04: 3 Working and Living Conditions of Women Workers in the Sawmills in Zimbabwe

Greater T. Nhiwatiwa

Division of Occupational Health & Safety, Mutare, Zimbabwe

Occupational hazards through direct exposure and poor health living conditions arising from economic hardships, have led to chronic disability and stress among women workers in Zimbabwe. This study describes a further analysis of women working in the sawmills in Zimbabwe.

In an analysis carried out to 396 forestry and sawmills workers in 1998 -1999 of which 36 were women .The study was to find out causes of accidents in the timber industry. The results of the questionnaire showed that there is an increase in the number of women working in this type of sector and also an increase in injuries among these women.

Aim: To further investigate the occupational health effects among women workers with regard to working and living conditions for the purpose of preventive intervention.

Method:

- 1. Another questionnaire is to be distributed to women workers in sawmills
- 2. Visit the locations where the women workers are accommodated
- 3. Visit their workstations.

Conclusion

Results of the study are expected to provide useful insights into appropriate preventive measures.

MoP04: 4 Venous leg ulcer impact on women social and economic conditions

D. Triponiene, I. Gudgalyte, V. Triponis Department for Vascular Surgery, University Of Vilnius

There are most discrepant data on prevalence of venous leg ulcer (VLU) in women. Edinburgh study presents the prevalence of 1% in the male and 0.2% in the female population. Some Swedish investigators report the prevalence of VLU of 0.22% in men and 0.49% in women. There should be about 50 000 people with VLU in Lithuania. The aims of the study reveal some social and economic factors in women suffering from VLU.

Method. 97 patients were admitted for VLU to Vilnius University Hospital in the period of January1, 2001- October 10,2001. Of these, 58 (59.8%) were women. Mean age was 63 years, the range being 35-80 years. History of VLU ranged from 2 weeks to 20 years, mean duration was 5.5 years. There were 31 patient residing in towns and 27 were from small towns and villages. Fifteen patients were after primary school, 31 after middle school and 12 (20.7%) were after university. Data about ability to work, work conditions, possibility to get adequate treatment and nursing, causes of delayed ethiopathogenetic management were obtained from questionnaires.

Results. In 8 patients the disease did not interfere with labour activity, 37 (63.8%) patients were on pension but were engaged in vast scale of physical and mental activity. All their activities were restricted by VLU. 10 patients had lost their previous working position because of VLU and had to

constrain their expenses for treatment, which was ranging from 600 to 2400 Litas per year. All patients were feeling discomfort, 31 was depressive, 22 of them used antidepressants. The delay of adequate treatment in 11 cases was explained by fear to lose the work. Five patients had fear to heal up ulcers and to be deprived off disability pension. In all patients antireflux therapy was done and significant improvement of healing process was observed. Twenty (34.5%) patients were convinced that they had all possibilities to maintain recommended treatment at home and in outpatient clinic.

Conclusions. By analysing a small group of women with venous leg ulcers we revealed a socially neglected stratum of Lithuanian society which is left without proper attention both from the side of health care authorities and social services. The problem need for further investigation.

MoP04: 5 Repercussion of the 12 Hours of Night Works on the Health and the Family of Nurses. With Gender Focus.

Ysrael García Casanova. National Institute od Endocrinology. La Habana. Cuba

The Cuban woman carries out a main roll in the social development. In this profession the woman assumes more than 90% of the labor force. A prospective and comparative study was carried out in order to determine how the 12 hours of night work influence the health and the relationships in the home of the nurses as well as to compare it with those that work just by day and with men in this profession. 300 male and female nurses formed the sample, 50% of each gender, 46.7% worked a full time "FT" (from 7:00 to 15:00 hours) and 53% worked part time "PT" (12 hours by day or by night).

The age average of the women was of 34,5 years old and 32,8 years old in men; among nurses with PT prevailed the single ones and divorced (31,2% and 43,8% respectively) and in those that work FT there was a bigger frequency of married ones (64,3%), for male and female nurses with FT results cabier to have children regarding those that work nights (76,6% and 51,4% versus 38,8%); the 72,5% of the workers with PT manifested difficulty when planning to have children, this didn't happen in nurses with FT; within the workers studied it was found that there is less frequency of sexual relation in PT nurses, the nurse profession was the main cause of divorce in the 65,7% of the PT workers; it is more common the swalching of couple among nurses with PT (2,5 times) regarding those working just during the day (1,9 times), just the 20% of the nurses with PT may rest after finishing a 12 hours journal: stress(45%), anxiety(26,2%) and irritation(8,8) were less frequent in women with FT and in all men; PT women manifested varixs(28,8%), migraine(33,8%) and respiratory sicknesses (16,2%) percents significantly higher compared to those at FT and men; the 78,8% of nurses with PT show sleeping troubles not being significant in men or women in FT, the 36,2% of female workers at PT suffered irregular menstruation, this only happen in the 24,3% of those that work FT in the studied sample. In conclusion we can say that PT workers (including the 12 hours at night) rebound negatively in the health and life of the nurses family not showing these problems in those that work FT (only by the day) neither in men practicing this profession.

MoP04: 6 The Challenges of Rice Cultivation to the Female Rice Farmers in Cote d'Ivoire

Monica Idinoba West Africa Rice Development Association

Rice is the principal food crop grown in many areas of Cote d'ivoire and it is one of the most important staple foods for the country's urban population. In Cote d'Ivoire rice is consumed by two third of the population (846000 Tonnes/yr) and have a great importance in ivoirian food (Adesina 1993).

In many parts of the country, primarily female farmers produce rice. These women are usually undernourished and burdened with additional responsibility of being a wife and a mother to the entire extended family members.

Though the rice crop is easy and simple to cook and delicious to eat, very few consumers really wonder and appreciate the strength, time and health risk involved in the cultivation says one farmer.

Rice fields are hot spots for breeding mosquitoes and prevalence of malaria and other viruses. (IRRI, 1988).

Many of the farmers are exposed to constant malaria attack all the year round due to high infestation of the environment and as a result, malaria continues to be a significant human health problem.

Field survey involved the use of questionnaires on person to person interaction across the rice land ecosystem. The objective was to tell the female farmer's story, highlight her challenges especially with respect to health and make recommendations to the government.

MoP04: 6 Occupational Health and Safety: Issues for older Australian Women

Elizabeth Bluff, OHS Program Director Co-author (presenting author) Linley Hartmann University of South Australia 500 1 Adelaide Australia

This paper examines occupational health and safety issues as they concern older Australian women workers. The present generation of women in the workforce who are entering the pre-retirement age group of 45 to 54 years of age and the early retirement age group of 55 and above years have a higher participation rate than previous generations and also a different participation pattern. This cohort includes the first women in Australia who expected to have a life long career with or without marriage and also a group who were less well equipped and expectant of this when their circumstances required that they consider and take up this option. This is the first cohort for whom participation rates of married women have been maintained into the pre retirement age group due to either economic necessity or interest. It has also been widely demonstrated that these women have not only worked but have also maintained more responsibility for their home and family than their partners.

The continuing workforce participation of this cohort is of interest because recent Australian data indicates that older workers are not only more prone to work-related injury and disease which involves more than I 0 days absence but that women are more prone than men. This paper explores the occupational and demographic profile of these older women workers and examines the occupational health and safety data to suggest reasons for these higher levels of occupational injury.

MoP05:Occupational Health and Safety, 2

MoP05:1 Confirmation of the 3-factor structure of the Maslach Burnout Inventory in nurses

Johanna E.M. Sale, Michael S. Kerr, Judith Shamian and Michael Manno Institute for Work & Health, Ontario, Canada

Occupational burnout measured by the Maslach Burnout Inventory (MBI) has been applied to health care service providers such as nurses, physicians, paramedics and dentists. The vast literature on burnout in nurses appears to indicate that nurses are especially susceptible to burnout. Although applied extensively to nurses, the MBI was developed using a sample of 11,067 human service workers, of which only 13% were nurses. The MBI measures three components of burnout: emotional exhaustion, depersonalization, and lack of personal accomplishment. Previous studies have failed to confirm the 3-factor structure in nursing populations using modelling techniques. This study tests the 3-factor structure of the MRI using confirmatory factor analysis (CFA) on a sample of Ontario nurses. Data from a large cross-sectional survey of registered nurses in acute care hospitals in Ontario conducted in late 1998 and early 1999 were used to examine the 3-factor structure of the MBI. CFA results show that all 22 items from the MBI loaded correctly (only two error correlations were required, with one cross loading observed). Factor loadings were strongest for emotional exhaustion. Our results confirmed the presence of the 3 distinct factors as proposed by Maslach et al. indicating the model is applicable to our nursing population.

MoP05: 2 Mental well-being and musculoskeletal disorders: A comparison between Swedish and Australian dental hygienists

Viola Ylipää Högskolan Dalarna, Sweden

Purpose. To compare Swedish and Australian dental hygienists regarding work conditions, health, and mental well being and to further develop a health model for this profession.

Methods. Questionnaires were sent to all 376 Australian and a random sample of 575 Swedish hygienists (a 275-item instrument). Country-specific factors, such as work characteristics and life style and the factors' relationships to self-rated health and mental well being were analyzed. Interaction effects of *age x country* were studied by two-factor ANOVA. Discriminant functions were used to predict country and age group memberships. Multiple logistic regression modeling for a health model was tested.

Results. The response rate was 86% in Sweden and 71% in Australia. Work-related musculoskeletal disorders, professional ambition, and demands from difficult patients were the factors most different for the two countries—generally indicating higher values for Australia versus Sweden. Arthritic hands/loss of sensitivity in the arm-hand and intellectual job satisfaction were found more often in hygienists ages ≥42 than in hygienists ages <42. Professional ambition was higher for ages <42. Working 25 hours or more per week with clinical work, active leisure, being ages <42, and high management support at work relate to good general health. Work-family overload was associated with lower general health. Higher mental well being was related to high perception of own mastery and high management support. Lower mental well being was related to

high work-family overload, work efficiency, and practicing in Australia. Work-family overload, scaling work, work relations, practicing in Australia, and *ages* <42 were associated with more musculoskeletal disorders.

Conclusions. An earlier hypothetical work and health model, on which this study is based, was expanded with these factors: country-specific work setting, age, and work relations. Australian dental hygienists had more musculoskeletal disorders and experienced lower mental well being related to organizational work factors. The results suggest a need to consider sociodemographic, occupational, and cultural aspects in studies of work, health, and well being.

MoP05: 3 Women, safety, and working conditions in Swedish municipal health-and-care sector

Eija Viitasara and Ewa Menckel National Institute for Working Life, Karolinska Institute, Sweden

The health-and-care sector accounts for over half of all work injuries caused by violence according to the Swedish Information System for Occupational Accidents and Work-Related Diseases. A majority, 95 percent, of the personnel in this sector is female. Limited knowledge in this area formed the background for a research and development project undertaken by Sweden's National Institute for Working Life and the trade unions.

Aims: The purpose of this presentation is to describe the extent of the problem of violence and its consequences for the health care organisations and the personnel.

Method: A nation-wide survey of the work environment and risk situations due to threats and violence was conducted. A questionnaire was sent to a stratified random sample of 2,800 local-government employees in the health and care sector. In total, the study group consisted of more than 172,000 individuals. The response rate was 85 percent.

Results: As many as 51 percent of respondents reported having been the target of an act of violence (verbal or physical) over the previous year. Acts of violence or threats were reported on a daily basis by over 9 percent of subjects, and several times a month by 67 percent. Just 3 percent were absent from work for a period of up to one week as a consequence of threat or violence. Physical injuries were reported by 19 percent as a result of violent incidents at work. Negative emotional outcomes among personnel were common. The experience of threats or acts of violence also influenced personnel in their work. 56 percent reported that they were more cautious, and 24 percent felt less joy from their work. The work-related conditions where threats and violence occurred were varied. 71 percent of the total group were working in elder care. Only 38 percent were working full-time and 58 percent daytime. To work on your own (without any co-workers) was not very common. Only 42 percent of the total study group were doing so. Organisational changes, such as downsizing, were reported by 51 percent and high workload by 32 percent.

Conclusion: Threat and violence in health-care settings is a considerable work environment issue and therefore a problem for women. For successful prevention, greater knowledge is needed of the consequences for the organisation, the work situation, and the health-care personnel.

MoP05: 4 Influence of familial variables in physical and behavioural health index: differences regarding to sex, age and job

V. Cardenal, M. P. Sánchez-López; University Complutense of Madrid. M. Ortiz-Tallo, University of Málaga.

The present study is focused on the comparison of the following groups: a) 100 women working outside their homes, b) 100 housewives, c) 100 women unemployed, d) 100 men who have a job, and e) 100 men unemployed in Personal well-being, Self-esteem and Anxiety as indicators of behavioural. However, without a consideration of physical health related aspects, health evaluation would be insufficient. Therefore, risky behaviour and harmful habits have also been measured, as well as the presence of physical disease and discomfort or pain associated with it.

With respect to the results, we can say that *women* have a bigger tendency to suffer from symptoms associated to physical disorders and present a number of psychological traits that predict vulnerability to anxiety disorders, neuroticism and depression mainly. We can also conclude that *housewives over the age of 44* constitute the group with highest risk, among women groups, to suffer more intensively from these types of disorders showing a higher degree of physiological anxiety and global anxiety. *Mature working women* are the second group with a highest score in physical pain. In opposition, when men have a permanent job they become the group with a higher index of emotional stability, self-confidence and assertiveness, especially in working men over 44.

MoP06: Agents and Activists for Change Strategies and Practical Examples

MoP06:1 Measurement of Hope and Hopelessness as Independent Dimensions of the Women Personality

Aleksander A. Gorbatkow)
Pedagogical University of Kielce, Poland

Background: Hopelessness is one of emotional traits underlying unsuccessful work performance and health disorders (Beck at al., 1974; Seligman, 1990; Snyder, 1994, 2000; Stotland, 1969). Some researches on the emotions and subjective well-being suggest that Hopelessness (pessimism) and Hope (optimism) are partially independent constructs (Chang at al., 1997; Marshall at al., 1992). The eventuality of the different relations of Hopelessness and Hope with work parameters and health parameters from these findings follows. The appropriate techniques are necessary for research of this problem.

Aims: To test the convergent and discriminant validity of the Hope and Hopelessness dimensions of Beck Hopelessness Scale in female sample.

Method: 106 female (primary school teachers aged 20-48 years, the inhabitants of village and city) completed two-dimensional (positivity dimension and negativity dimension) polish versions of the follow scales: Beck Hopelessness Scale, Bradburn Affective Balance Scale, Rosenberg Self-Esteem Scale and Spielberger's STAI with 4 points "agree-disagree" response options (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

Results: Using confirmatory factor-analytic technique, two factor-analytical models are compared: Model with one factor (Positive Emotions and Negative Emotions as poles of one bipolar dimension) and model with two factors (Positive Emotions and Negative Emotions as two relatively independent unipolar dimensions). Two-factor structure has better fit than one-factor structure.

Conclusions: The findings give an opportunity of using the Beck Hopelessness Scale for measurement of Hope and Hopelessness as relatively independent dimensions of the women personality.

Keywords: Hopelessness, Hope.

MoP06:2 NGO Activities for Working Women 's Wellbeing in Japan

Yoko Araki ^{1),} Keio Okayma ²⁾, Yuriko Doi ^{3),} Junko Noda ^{4),} Masako Horiguchi ⁵⁾

- 1) The Hochi Shimbun, 2) The Asahi Elles, co, 3) National Institute of Health,
- 4) Nonohana mental clinic, 5) President of PWCSH

Aims: In November 1997 'the Professional Women's Coalition for Sexuality and Health (PWCSH)' was founded to establish the better health and welfare system for women in Japan.

Members: Members' background vary enormously, ranging from medical professionals and researchers to sociologists, teachers, journalists and congress-women. About 550 members and ten foreign medical professionals joined as advisers. There are 10 working groups and the group of working women's health has a good co-ordination with other groups.

Strategies: The strategies are lobbying, publishing newsletters, pamphlets and books, making education videos and slides, running Web-site, giving lectures and seminars both for professionals and the public, opening international symposia, exchanging ideas and information with academic researchers, policy makers and media, and conducting various surveys.

Activities of Working Women's Health Group: Annual Symposia have been conducted on wide variety of themes. They covered issues about contraception and working women, why women quit to have babies, mental health of working women, 'Karo-shi (over work death),' sex and gender differences in work places and how information technology influences working women's health. The panellists were medical professionals, sociologists, epidemiologists, economists, governors and so on. The coalition could establish good relationship between the Center for the Advancement of Working Women, which is a blanch institute of the Ministry of Health, Welfare and Labor, Japan Medical Women's Association and American Medical Women's Association, and could got fund from various companies. The reports on working women's health were published and distributed to women's centers of all parts of the country.

Conclusions. The issue of working women's health is complex. The group consisted with rnul6-professionals were quite effective. The stronger network with government or companies should be built and sound financial foundation should be established.

MoP06:3 Society and the organization of work

<u>J</u>essie K. Chita (Mrs) Ndola, Zambia

Looking at the subject of women, work, and health I choose to address this issue in the area of 'Society and the Organization of Work' - that is the way the society and the organizations perceive a working woman.

1. Society

Generally speaking, the attitude of the society towards a working woman has not been very encouraging. We have seen that the society isolates itself from this group of people and looks for faults in them instead of embracing what the working women are doing.

Society condemns, giving different charges to the working groups.

My conviction is that if the working women can be fully supported by the society, for example with the encouragement and support that is necessary, we believe this can bring liberty between the two groups, the working women and the society and the whole world as a whole.

2. Organizations

When a woman is joining the organization, normally that organization would have advertised and called for capable people (men and women) for that particular job. In most cases when women are employed they have proved their capability for the jobs they are holding, in some cases they have been better than some men. Surprisingly, the situation has been that if a man and a woman are for instance holding the same position and a vacancy arises for promotion, it has been discovered that the woman will be sidelined and the man promoted, simply on the basis of her being a woman and not because she is incapable of doing the job!

A man would also be given higher pay than the woman would for the same job. This also applies to a lot other incentives applying to a particular job in which men are given preference over women with excuses such as 'you are married' or 'this man has bigger responsibilities', etc.

The big question is why can't a woman enjoy the full fruits of her labours? This needs to be addressed and corrected.

MoP06:4 The challenge of young women in the women's movement

Susan Babyrye Patience Media Production, Uganda

Being in mind that the world is male dominated and socially biased in determining gender. After the shifting of emphasis from women in development approach to gender and development and now Gender. It is important to consider participants of the different categories a stakeholder in this struggle.

Many people particularly young girls have greatly formed the prostitution industry which issue is not inversely acceptable by all societies. But such activities have a great deal of moral construction of young class of people (Girls). In order to have this review the young women have a role-play in educating the fellow young girls involved in the business.

We feel as young women, we need to give our specific views and ideas to take care of the young needs. It is true if you are to build a sustainable society, it is important the young class (In Luganda they say (Emitti emitogyegigumisa ekibira) its young trees that strengthen the forest society already have.

Take in mind that beauty lies in the hands of the beholder every male around including the bosses will purpose and many women have lost. Therefore, there is a massive need for strategic approach and movement of young women between the age of 15-30 years.

Society is dynamic from time to time, society to society learning a low, the different societies that have refused deliberately rejected to change i.e. the Masai and Karamoja in Kenya and Uganda respectively.

You will bear with me that elderly or mature women have dominated this field of women activities particularly the educated class.

Considering the working sector, young men have different challenge including but not limited asexual abuse and marginalisation of them at work. You will bear with me despite the fact that few women make up to secondary and many who have a job has to face different challenges if she is to continue.

Until now women genital multrition, women's circumcision in the eastern part of Uganda has remanded with a lot of challenges even from the women themselves.

Gender and development as a subject/course is being trained at University level, the same cannot be done at the lower levels as the study either social studies or religious education be the case of Ugandan systems.

The Roles Of Young Women In The Women's Movement Under The Theme Of Gender And Social Economic Aspect Of Inequalities In Working And Health.

There is urgent need for an indicate integration of young women in these programmes. Through not only meetings but also in the really result oriented activities that will enhance women education.

There is need to educate as from schools and higher institutions of learning the issues of understanding this society and effectively participating.

All in all the young women appreciate the role, their elderly counterpart have played for women's rights and empowering other women in the consideration of strategic need of approach.

There is urgent need for an indicate integration of young women in this programmes, not only meetings but also in the result oriented activities that will enhance women.

Defining gender as the social construction of manhood and female hood, it is socially, psychologically and culturally determined.

And relating gender to development which considers the qualitative and quantitative improvement of the peoples standard of living. Interlacing the two definitions it is important to for all stakeholders to participate in this struggle to demand for power since power is difficult to surrender.

The education systems of our African countries were developed by the dominant male gender hence the curricular systems are gender sensitive and biased.

There is need to educate as from schools and higher institutions of learning the issues of understanding this society and effectively participating.

All in all the young women appreciate the role their elderly counterpart have played in demanding rights for women and also empowering other women in the consideration of strategic needs approach.

It is difficult to eradicate such a practice beginning with the elderly women who are already circumcised and are the custodian of culture in societies.

The young class can effectively play a big role in such female abuse and other related women struggle.

This paper will focus such case studies as indicated the abstract. Poster and oral will do presentation. The main poster will provide qualitative and quantitative along this field.

MoP06:5 Social and Psychological Factors of Making the Professional Image of a Woman the Lecturer of Engineering Disciplines

Lubov T. Zhukova, Galina I. Meleshkova State University of Technology and Design, Vitaly V. Zhukov State University of Fine Mechanics and Optics, all St. Petersburg Russia

Issue: Professional image is not only the social and political phenomenon, but also is medical, psychological, pedagogical, and acmeological. The experience of our long-term psychological, pedagogical and scientific activities in St. Petersburg State University of Technology and Design (SUTD) shows the growing interest of technical university professors to imageology and valeology, to harmony of physical, spiritual, professional and economical personal status, to healthy mode of life. The presence of gender asymmetry among the professors of technical universities defines the need of universities in organizing the monitoring of professionalism and in rational selection of scientific and practical methods of studying and making the professional image.

Target: The development of scientifically capacious technologies of the professional image of a woman the lecturer of engineering disciplines on the basis of psychodiagnostics, acmeology of education and psychotherapeutic methods.

Methods: Cattel's test (16PF and a questionnaire), method of Koses' Cubes, tests: Psychomotoric rigidity, Intellectual ability, ''Nonexistent animal'', Circles and arrows, Geometric figures, K. Leongard's characteristic questionnaire, K. Thomas' behavior descriptions and a number of other psychodiagnostic methods.

Results: Professional image as a psychopedagogical phenomenon contents objective and subjective aspects. Professional image of a woman the lecturer of engineering disciplines includes certain professional qualities relating to intellectual flexibility, psychomotoric lability, emotionality, and stress resistance. High level of professionalism of a woman the lecturer of engineering disciplines is determined by such psychological features as communicability, sense of empathy,

reflexity, self-motivation, tolerance. The success of making the professional image of a woman the lecturer of engineering disciplines depends on certain social and psychological factors. They are: knowledge of image making information sources, understanding the role of irrational image and attraction in professional upbringing of personality, high level of speech and thought activities, creativity and space perception. There are accumulated the social and psychological expectations and evaluations of professionalism in the professional image from the view of certain socium groups (undergraduate students, graduate students, colleagues, administration, independent experts) a well as self-perceptions of personality, social activity and capability for work

Conclusion: Possession of scientifically capacious technology of making the professional image contributes to improvement of health of women the lecturers of engineering disciplines. During the mini trainings the professors can elect the optimal behavior models, form the psychological readiness to hit the highest professional achievements and to improve the personal life activity including the state of health.

MoP06:6 Women Rights And Improvement Of Rural Women Condition

Ahmad: Waheed

World Asian Workers Organisation, Lahore Pakistan

The independent and sovereignty of any country depends on its economy. The presence of a large middle class ensures the vitality of the national economy Pakistan is as agricultural economy, 70 per cent (80 million) of its people are engaged in the agricultural sectors and lived in the rural auras. The women in rural areas the big victim of society, the rural Women work had without taking any penny for her Labour, the rural women is work for 24 hours and facing a lot of problems like the heath, education, social, protection, food, poverty and unemployment, etc. The situation of rural women is still unchanged and going worst day by day. Today we entered enter 21st century but we failed to achieve or goal we need a plat form for the achieving the of rights of rural women, empowerment of rural women and the able to claim the human rights especially development, heath education well- being including food, clothing and Medicaid care.

We should take steps for the development of the rural women rights. now the time has come to break the strangle hold of being landlords over the agricultural sector out form the rural population on living below the poverty line. The recognition of rural women right is basic progress in economic development. Without giving basic facilities to rural women the country will not prosperous in agricultural economy/ development because women in rural areas are playing vital and important role in farming.

Without strong legislation for rural women no improve can be made in such areas laws should be framed to make it mandatory laws for the rural women development and economic progress. That a middle-income farming family and working on this formal will become a source of in came if the law declared them for the farm women which improve the social sector living conditions in the rural areas will improve roads, hospitals school heath crates etc

Rural women produced their food and guaranteed food security for the society and counties. The rural women producing more than half of all the food but in all great efforts the women remain indigenous, the rural women are mat the master of their own destiny. In all efforts, the rural women abilities have been denied. The rural women preserves the traditions and recognize the importance of forests, as food, fodder and many other products used in household thereby, all these proves the particular interest of women in sustainable development and also in preserving the environment.

These all are contribution which rural women are doing in this daily work without demanding any share. This seniors must Chang. The rural women prove them that they are creating dynamic

and courageous partner in development. She plays a criticized role in feeding a rapidly increasing populate and reprint a formidable potential that could help in meeting the challenges of 21st century this is create a new courageous encoring potential in rural women life.

It is also important to mention here that proper use of development founds will help generate employment for the rural women and also arrange a suitable contract systems which creates partnership in agricultural development and strong women economic empowerment.

MoP06:7 Relations Between The Socialpartners On The Labour Market: Consequences For Women

Maria Adhiambo Onyango Kisumo, Kenya

Gender as a concept and approach to workplace and poverty alleviation has formed main thrust of world conferences for the last five decades. Complementarity of roles of women and men in sustainable poverty alleviation has direct implications on environmental friendly use of natural resources in any local setting but the practicality presents great gender differentials.

Gender analysis Survey (1998) reveals that women bear the impact of poverty in developing countries and poor women usually provide for their families without support of male partners. They have no collaterals, and no titles to property; a state that makes them dependent on male relatives for any economic activity. Vulnerable groups in society tend to be women and youth; however, vulnerability should also be a point whereby rich individuals can be vulnerable in economic developmental processes in which "poverty alleviation is a key subject.

Sustainable development calls for economic empowerment of individuals in a socio-economic environment, which is best, approached from gender perspective. Poverty alleviation is a process and not scientific experiment within time frame. Sustainable environmental friendly approaches from gender perspective should analyze the current to project into the future. Workable solutions and strategies will result from gap analysis between the current and desired, taking into account effective use of available resources and the potentialities of equity in distribution.

The debate in the paper should catalyze research agenda for academicians world wide to formulate workable strategies for economic development for sustainable gender complementarity.

MoP06:8 Promotion Of Women's Role In Social-Economic Development Strategy Of Vietnam

Nguyen Thanh Hoa Vietnamn Women's Union)

Vietnamese women make up more than half of Vietnamese population and of the labor force and participate in almost sectors. With their great role and potentiality, women have important contributions in the socio-economic development of Vietnam. However, their material life has not been developed, their working conditions has been low. They also have to burden the domestic chore and have not enjoy a full reproductive health care, especially in remote and mountainous areas. In order to promote women's role and potentiality and strengthen women's participation in the labor force in the social-economic development strategy of Vietnam, the Government should issue suitable policies and measures. The Vietnam Women's Union should issue plans of action aiming at strengthen awareness of women and the society on gender equality and improve service systems on health and society, develop programs on vocational training and IEC program on reproductive health and activities to raise women's income.

TuW01:Politics, Legal Systems and Economic Aspects of Women, Work and Health; Women in Transition

TuW01:1 Mongolian Women in Transition – Balancing Work and Family Life in Rural and Urban Areas

Myagmartseren Chultem, York University, Canada

This paper will explore the changes of working and health conditions of Mongolian women during the transition period, which started in 1989. This transition, from a planned economy to a market economy and political democracy, brought new trends and challenges. The challenges have affected women's work and health more than that of men in Mongolia. For example, in the major economic restructuring between 1992 and 1995, 63% of women lost their jobs compared to 37% of men. So, I am specifically interested in exploring the intersection of discourses of gender issues constructed around issues of women's work and health during this transition period.

I will focus on the differences of working conditions and health situations between rural and urban women in Mongolia. Over 40% of the Mongolian population are nomadic, and engaged I herding. The labor division in a herding family is reasonably distinct, although rural couple's work together in many areas during production period. When it comes to the income stage, usually male herders go to city to sell their products, which means they are the income earners. The livestock privatization in 1990 made herders the cattle owners. However, these fundamental changes had a negative impact on women's working and health conditions in rural areas. In contrast to rural women, urban women work outside the home for wages. According to the National Statistical data 64, 6% of students in bachelor or graduate studies programs were female. At first glance, it seems that urban women enjoy their high education and high income. However, urban women tend to have less job security than rural women do and more likely to be poor if they are heads of households.

My study will attempt to reveal that urban and rural women of Mongolia are facing different obstacles in working and health conditions during the transition period. To do so I employ secondary sources collected by the Government of Mongolia and NGO-s as well as documents developed by the international organizations.

TuW01:2 Snapshot Australia: Women in Paid Work

Andrea Schoebridge, Karl Schoebridge Curtin University of Technology Perth, Western Australia

In a country with one of the most gendered work forces amongst comparable economics, more than half of Australian women in the paid workforces found themselves at the turn of the century clustered into four industries: Retail Trade (17, 6%), Health and Community (18.8%), Education (10.6%) and Property and Business Services (11.3%) Occupationally, nearly two thirds of were

intermediate or Elementary clerical, sales and service workers (43, 2%), Professionals (20,3%). Closer inspection found continued gendered divisions within these industries.

With consecutive government's policy wedded to economic rationalism and the effects of globalisation beginning to bite, increasing numbers of women, many unwillingly were turning to part-time employment. The majority (56.6%) of the underemployed paid workforce were women, as was the proportion (55.3%) of multiple paid job holders.

Predictably, paid work related morbidity was also heavily gendered. In western Australia, 71.7% of all lost time diseases affecting women were mental disorders (39.3%) and musculoskeletal (32.4%). Most (63.3%) injuries were associated with muscular stress (42.4%) and falls, trips and slips (21.2%). Again patterns of disease and injury were strongly linked to paid work force participation in terms of both industrial and occupational categorisation. For example, the majority (67.7%) of occupational injuries to women in Western Australia's Health and Community industry were to staff in hospitals and nursing homes with muscular stress occurring more than three times more often than the next highest injury category of falls, trips and slips. The economic bases of publicly and privately funded care are underlined by the majority of injuries being suffered by registered nurses in hospitals but by ward helpers in nursing homes.

Further reflecting Australia's gendered work place, little attention has been paid to health and safety in industries dominated numerically by women. No record of women's occupation was required on death certificates until 1984 and the first national compilation of women's occupational health and safety data was issued in 1994.

Women's participation in trades unions has been low, resulting in a focus by collective action on organised, male dominated industries. Industrial relations reform, including marketplace deregulation, has further damaged women's ability to negotiate wagers and conditions. The average weekly wage has consistently been lower for women than men ,across and within occupational categories

The transition to new economic organisation must be embedded in a rational framework of support that recognises the different but equal contribution made by all sections of the national workforce. The demands of global investment will make this a challenging goal.

TuW01:3 Are Lithuanian women ready to develop a democratic society?

Ausra Griskonyte and Audrone Sagaityte Vilnius Mental Health Center, Lithuania

Women in Lithuania often complain about different aspects of life: poor economic situation, marriage and family problems, lack of respect for woman, etc.

A study of women's life script has been carried out to check whether they act for a positive change in their life situation and whether they are able to adapt to rapid changes in the socioeconomic life of the country.

Life script is a transaction Analysis (TA) concept denoting the unconscious life plan derived from early experiences that govern the way life is lived out. Usually referred to simply as script. The final outcome resulting from script process is called the Payoff. There are three types of payoff – winning 9achieve their aim and make the world a better place to live in), non-winning (banal) (neither winning, nor losing, take no risks) or losing (do not achieve their aim or even having achieved it feels unhappy and miserable).

Method: women, after having attended a 36 hour psychoterapeutic training program which was dedicated to the enhancement of self awareness, were asked to create a fairy tale in which the author would be one of the heroes.

85 women have participated in the survey, age 20-65 years (40,3 years old in average). 27% of the participants had higher education and 73% were graduates of college or high school. All of them were employed at the moment of investigation. 76 of them were Lithuanians, 5 Russians and 4 Polish.

Having analysed the projective material (tales) we found, that only 20% of the women see progress and success as possible in their life, i.e., They have a Winning Script. 60% of the subjects have banal (Non-winning Script). They lack autonomy, relate their future to patriarchal dependence upon a husband, family, parents and other authorities. The rest 20% of the women see no perspective for positive change, depressive, pessimistic life vision is prevalent among them, and Loosing Payoff is expected. 7% have suicidal ideation.

35% of the subjects demonstrated passive behaviour tendencies. 57,8% of the women strive to engage into symbiotic relationship with men, they lack healthy autonomy and independence.

On the basis of these results and tendencies we conclude:

- the majority of Lithuanian women still have difficulties to liberate themselves from the passive behaviour life script that was forced on them by the authoritarian society.
- 41% of the women relate their happiness exclusively to marriage. They envision themselves only as dependent wife role players and still experience a strong impact of patriarchal (historic) culture.
- Only a minor part (just 20%) of women take responsibility for the aim of their life and achievements, who can psychologically be equal partners for men and independent competitors in the economic and political life of the country.

TuW01:4 Socio-economic status of women employed in the healthcare sector in Kyrgyzstan: problems and trends

Gulgun Murzalieva

Health Policy Analysis Project, Ministry of Health of the Kyrgyz Republic

Soon after gaining its independence, Kyrgyzstan like other CIS republics started experiencing a sharp economic decline. This, together with growing unemployment and insolvency of the social protection and social aid systems lead to impoverishment of the population, especially that of women. Women alcoholism, women crime, crisis of family values and lowering moral standards are increasingly sharp problems.

The work uses analysis of the existing statistical data. Workers of the publicly funded social sector (doctors, teachers end others) have experienced special difficulties. Women represent majority of the labor force in the healthcare sector: 65% of the doctors and 91% of the nurses. From one hand, low quality of working conditions (low salaries; lack of flexible working schedules; unclear division of responsibilities; catastrophic deficit of drugs, materials and equipment; and uncertainty) lead to high turnover in the sector. On the other hand, these cause stress, which, in turn, conditions worsening health indicators for women in the sector (anaemia, deteriorating indicators of reproductive health).

Existing legislation does not provide enough protection of rights of women-medical workers. It is necessary to introduce contract-based employment and to improve the relevant regulatory basis. It

is also necessary to strengthen the role of civil society, medical professional associations, and trade unions in bettering the working conditions of women employed by the healthcare sector.

TuW01:5 Women And Unemployment Problems In Lithuania

Liongina Beinoraviciene Lithuanian Labour Exchange, Vilnius, Lithuania

The Lithuanian Labour Exchange began its activities on March 1, 1991. Its main objective is the implementation of the state's employment guarantees for the population within the labour market system. It's a state organisation at the Ministry of Social Security and Labour. It is made up of one National and 46 Local Labour Exchanges (The staff-is more 1000 persons). Tripartite commissions have been established under the jurisdiction of the labour exchanges. The commissions have the same number of members representing employees, employers and public authorities. All members have equal rights.

After the re-establishment of Lithuania's independence in 1990, a Law on the Employment of the Population was drafted and later passed on December 13, 1990. The Seimas of the Republic of Lithuania amended the law with new additions in January 1996 and called it the Law on Support of the Unemployed. In Article 8 are noticed individuals to whom additional guarantees of employment are applicable. Among them are women with children under 8 years of age and men who are single parents of children of the above age.

By implementing the employment guarantees, the labour exchanges have been seeking for matching of labour force supply and demand, by implementing programmes of vocational training, supportive works and job clubs, organisation of public works, support for employment of unemployed who are socially most injured.

In 1998, 204,3 thousand unemployed were registered, of them: 94,5 thousand women (46,3%), 51,0 thousand youth (24,9 %),7,1 thousand graduates (3,5 %),67,2 thousand unskilled (32, 9%).

Average annual unemployment rate - 6,4 per cent. Unemployment rate among women increased since the beginning of the year from 6,9 % to 7,0 %, while among men – from 6,5 % to 6,9 %. The highest unemployment rate at the end of the year was registered in industry -9,7 %, the lowest in the sector of services -5,3 %. The unemployment rate on the 1 st of January 1999 – 6,9 %, on the 1 st of January 2001 – 12,6 percent, on the 1 st of January 2002 –12,9 percent.

During 2001: 260,0 thous. registered job seekers, 249,7 thous. of them unemployed (137,9 thous. men, 55,2 %, 111,8 thous. women, 44,8 %).

About 137 thousand of registered vacancies was reached by the Lithuanian Labour Exchange. 65 percent of this number were offered for constantly job. 52 percent of registered vacancies- in service sector, 12 percent – in construction, 30 percent –in industry and only 5 percent in agriculture. The biggest number of vacancies in the industry was offered by such branches as textile and fabric products, wood and wooden articles, food, bewerages, tobacco, basic metalls and ready made metal articles. A demand for qualified labour force constantly increased.

Female unemployment, at 11,9% in 2001, was below the male rate 13,2 %. While women's unemployment rate is slightly below that of men, the gender –gap is relatively small when compared to the situation in EU member states.

However, some negative aspects of women's situation have been identified. First, sectoral and occupational patterns of employment are very different for men and women. At the sectoral level, women are heavily concentrated in education and healthcare – accounting for 29 % of total female employment, but only 7 % of men's jobs. In term of occupations, women are more likely to work in professional and technical occupations (20 % and 10 %, respectively, of all women workers, as

compared with 8% and 5 % respectively for men). Women are under-represented in senior management jobs and in skilled and semi skilled manual work.

Although the gender pay-gap has narrowed somewhat in recent years women's pay is still only slightly over 80% of men's. This gap persists despite the fact that women's average educational levels are higher than men's and that more women work in higher occupations such as professional and technical work. The main factor underlying the gap appears to be that pay levels are relatively low in education and healthcare, where women are heavily over-represented in terms of their share of employment. The specialists explain this difference in wages so, that many factors are relate to this difference:

The structure of employment of men and women (the distribution by economical activities and categories of employees), - professional composition, - level of qualification.

Lithuania has taken steps to ensure that its legislation and all economic and social policies support equal opportunities for men and women in the labour market. The Law on Equal Opportunities' for Men and Women was passed in 1998, the Office of Equal Opportunities' Ombudsman was established in 1999 and an Equal Opportunities' Commission was established in 2000 with representatives from 16 ministries and government agencies. Women's rights on the labour market are provided for in the Law on Support of the Unemployed, the Law on Employment Contract and the Law on Safety and Health at Work. A programme for Advancement of women was adopted in 1998, together with a detailed action plan for its implementation over the years 1998 – 2000.

The authorities' assessment is that there are several main reasons for the persistence of gender-segregation, despite the extensive legislative provision for equal opportunities. First, there is residual gender discrimination by employers in recruitment. A number of laws dealing with both labour relations and social security provide for privileges for women with children that do not apply to men with children or to childless person of both sexes. As these impose some additional costs on employers, it is felt that this effects the attitude of at least some employers to the recruitment of women with children, and that existing equal opportunities legislation is not sufficiently strong to discourage such discrimination. Secondly, there is insufficient provision of informationon gender equality in the labour market. Third, flexible work patterns are relatively underdeveloped in Lithuania, as are opportunities for women to maintain their skills and qualifications while on maternity leave. Together with difficulties in access to pre-school childcare, these factors make it difficult for women with young children either to remain in the labour market or to return to it after a long absence. Finally, women are less likely to enter self-employment, which accounts for a significant proportion of newly-emerging job opportunities.

The specific problems surrounding the hiring of women have remained virtualy unchanged. The employer who has the choise of several applicants does not conclude an employment contract with women who can not carry full work load and are likely to stay at home with sick children. The other problem is so called employer dictated age limits occupations are in such dominated jobs like secretaries, salespersons, service workers.

The new problem at the labour market is the following: very often there are jobseekers as well as vacancies, but jobseekers education, speciality or qualifications do not fit to employer's requirements. One central question for the Labour Market Administration is, therefore, how jobseekers can be influenced to choose occupations based on their interests, qualifications, and the labour market – not based solely on gender. Lithuanian Labour Exchange considers at his more important task to implement such active meassures that help women to return to the labour market. Lithuanian Labour Exchange have prepared meassures for the programm of women progress in

2001. Local labour exchanges analysed the situation of women in the labour market last year and organised sociological inquest. The support programmes for women are prepared in the local labour exchanges, where the share of women among unemployed is more than 40 %. The programmes to support the women by objectives are prepared together with municipalities. The possibilities to involve more women into public works were discussed together with care divisions in the municipalities. A lot of women returned to the labour market after long break of the job activity. They are not ready to integrate into the labour market. Local labour exchanges carry out the researches with task to clear up the motivation of the women. The local labour exchanges put into practice tests, placement plans, psychological support in the activity of job clubs. Different types of survey helped to better plan activities with the view of improving the work with customers:

-To prepare better targeted preventive programmes and labour market policy guidelines for more efficient implementation.

-To find out and study aims and motivation of unemployed addressing labour exchange offices and to work out jointly with them specific plans for employment.

- -To answer better the needs of employers.'
- -To get partners more involved in solving unemployment programmes.

The society in general and Lithuanian Labour Exchange have to work hard to shape the public opinion as the correct comprehension of motion of equality, to develop the sense of women's solidarity, to favour the growth of women's self-esteem and formation of the respective behaviour. It is necessary to gain men and women full-right parity at work, in the family and social life, social life security, educational and cultural life, responsibility for the environment care.

We suggest: to build a long term and large – scale co-operation of women at all levels in the societies around the Baltic sea. The task is – to support the democratic development in the countries and strive to increase the awareness on gender equality and promote models to develop equality,

to change the Lithuanian's laws, related to support for women's entrepreneurial activities (to grant special loans, microloans, start loans to women entrepreneurs (for business owned and managed by women and etc.), to enhance women's entrepreneurship in Lithuania (to create the network of advising, training, financing, mentor operation), to create international network aimed at supporting women by training on management, marketing and other issues, connected with organizing of business and helping to encourage women's participation in different spheres of social, political, economic and academic life (this can be done by supporting activities and facilitating exchanges of experience between women of all ages and from all areas of life, to increase state support for families through programs that are aimed at encouraging more active participation by fathers in child care,

to include in school study programs subjects and methods that encourage gender equality, as well as instruction about the basic aspects of family life,

To create all necessary conditions for flexible working regimes for employees of both genders and to avoid overtime and meetings after normal working hours that might hamper the performance of parental obligations, to develop programs in adult education centers on family education

TuW01:6 Changes in social status of Russian women in transforming society and their health implications

Yelena G Meshkova Institute of Sociology Russian Academy of Sciences

Russia started the transformational period having as a whole a healthy population. But even at that period some elements of the system were troubling. In transition period the then existing system of women's health protection was swept away by advancing of wild market economy. Socio-cultural factors: spreading of poverty and social changes of general character worsen the dangers that affect women's health - access of women to proper nutrition and health care and also the possibility to acquire and support the habit of a healthy way of life. The subordinate social status of women, physical or sexual violence, stress from 'double burden' might lead to women's psychological distress. Good health is considered by public mood in Russia as a priority value (72,7% of women and 64,6% of men2000, Yaroslavl region). People's collective orientation, their communal spirit is decreasing, many are becoming self-centred or alienated. The danger of alienation threatens 40% of women and 26% of men.

One of the stereotypes according to employers' point of view is that women's labour force is less 'profitable' and more cost demanding due to social guarantees provided for working women by the state.

Gender criterion should be introduced in the infrastructure of health care system and health protection should be the obligatory element of state policy.

TuW02:Gendered Aspects of Work Organisations

TuW02:1 Women at Workplace in Male Dominated Professions - Engineer Women in Turkey

Berna Zengin Arslan Middle East Technical University, Ankara, Turkey

The field of work is gendered and the occupations that are attributed to women are almost invariably characterized by lower wage, lower status, routine workload, unsafe working conditions, lack of craft traditions and weak union organization. Women workers are mostly seen as a "reserve army of labour" which can be sent back to "their" private sphere - the home- whenever they are not required in the labour market. Thus, women mostly work in jobs that have no future guarantee, such as "un-skilled", "semi-skilled" or part-time jobs. On the other hand, the number of women who have a professional career is low. Women are viewed as inconvenient for professions that require specialization or working over-time.

Engineering is a highly technical and "skilled", higher waged and status profession. It has both the lowest percentage of women - even among the specialized professions such as law, medicine and academy- and has a strictly rigid, masculine professional and organizational culture in which most of the women are almost alone in struggling with difficulties. Considering this situation of engineering it can be assessed as a crystallized profession where the practices of women in male dominated occupations can be observed clearly.

Turkey has a distinctive characteristic in terms of women's representation in specialized professions such as medicine, law and engineering: the percentages of women in these professions are higher than they are in many other Western countries. In engineering, women consisted of 12.4 % of all engineers in the year 1990 and 25% of all engineering students in the universities were female in the year 1998. Women's respectively high representation in engineering field is closely related with the modernization period of Turkey, which resulted with a tradition of women working in specialized professions. By keeping this situation in mind, in my presentation, I will mainly focus on the professional women engineer's workplace practices in Turkey. I will base my arguments and analysis on the in-depth interviews I conducted with 15 engineer women from different ages and fields of engineering, in the period between February and April 2000. I will elaborate on different ways through which women engineers are discriminated against both overtly and covertly, such as the boys' network, masculine ways of communication, protective attitudes of male colleagues, lack of consideration of women's housework burden and culturally determined dress codes for women engineers at workplace. I will give emphasis to the lack of a female informal networking at workplace, engineer women's avoiding same-sex peer groups and bringing forward their "masculine" characteristics in the public spaces and evaluate these as their strategies developed to be able to exist within the masculine field of engineering. In doing all these, I will aim to discuss the barriers constructed for women in engineering through the organizational culture, and the possible ways in overcoming them.

TuW02:2 Nr 151 Gender Aspects of Work in Lebanon

Mandana Hajj American University Of Beirut, Lebanon

Introduction and Objective: In Lebanon, women constitute 27% of the labor force, with progress by women shown in administrative jobs, banking and information sectors. However, women still tend to hold lower-level positions as compared to their men counterparts. In addition, working women are still expected to carry on the domestic and other social responsibilities. This 'unpaid' work needs to be taken into account, particularly within such a Lebanese culture.

Despite this increased proportion of women's entry into the workforce, there is very little data on the current status of working women in Lebanon. This study attempts to provide a better understanding on women's work and examine gender issues concerning work.

Material And Method: This study is based on:

- An analysis of the 1996 Population and Household Survey in Lebanon.
- A review of existing literature on women's health in Lebanon and an assessment of factors
- related to both paid and non-paid work.
- A review of laws and policies, addressing both work- and non work-related issues.

Results: An examination of gender aspects of work is performed. Gender equality is shown in few occupations such as academics. Additionally, a review of existing laws shows that there is preferential treatment of women, ranging from setting restrictions from certain jobs to specifying limits on working hours allowed.

Discussion and Conclusions: This review describes different elements of work in Lebanon with a focus on gender issues. In Lebanon, with the prevailing difficult economic conditions and low percapita income, more women are expected to join the labour market. Therefore, this study provides needed information on such issues as the degree of inequality between men and women.

TuW02:3 Women protagonists: birth, events and transformation of a small school-hospital

Giuseppina Bock Berti Milan University, Italy

On the occasion of the Nurses' International Day (May 12, 2001), a conference organized by the Hospital San Paolo of Milan which is one teaching area of the Milan University, recalled its origin coming from the merging of a former "charitable organization" and the hospital "Princess Iolanda". The origin and events of this hospital took place within the Red Cross Italian National Society founded in 1864 exactly in Milan. Here, at the turn of the 19th and 20th centuries, the traditional and sincere ideals of solidarity emerged within a group of Milanese wealthy noble women.

Quito soon, in 1908, the first school-ambulance" was inaugurated for Red Cross volunteer nurses. In 1912 a small hospital was built next to the school, under the name of Princess Iolanda di Savoia, and in 1916 the first one in Italy, passed under the directorship of Italian Red Cross. The "school-hospital" altogether worked up to the 70's when, in accordance to the new regulations, the hospital was included into the new San Paolo Hospital. The School however went on working autonomously up to 1994 whet nursing education moved into university diplomas and, from 2001, university degrees. The old building still hosts the Regional Committee of the Red Cross, with renovation programmes in view of building a new nurses' rest-house.

This story, ever since the beginning, saw females as protagonists and their intense organizational, teaching and advertising work will be here recalled and valued.

Actually it is worth emphasizing some aspects, often neglected, of a traditionally feminine profession, lived with changing emotional, relational and educational issues of assistance roles; cultural, economic and social changes of collectivity; development of medical and technological knowledge and, last but not least, of problems associated with the crucial issue of "equal opportunities".

TuW02:4 Kreckel's concept of social inequality and the gender dimension at work

Gabriela Riedl

Vienna University of Economics and Business Administration

This contribution develops the key thesis that a drastic redistribution of access to generally available and desirable social goods and to social positions is taking place in enterprises, affecting bot individuals and groups. This redistribution is a result of changes of the organisations of work, of technologies and of human resources, which aim, in particular, at reducing cost, at securing competitiveness and employment locations, and at increasing productivity and quality.

The redistribution occurs due to specific social, biological and cultural criteria with a simultaneous focus on qualification. On the basis of Kreckel's Concept of Social Inequality (1992) it is shown that women are more likely to be placed at a disadvantage due to organisational changes than men: Their access to generally available and desirable social goods and to social position that are characterised by unequal opportunities in terms of power and/or interaction is permanently restricted in organisations due to the differenting the feature of "gender", for which reason their opportunities to work and live are lastingly affected.

The paper presents evidence to support Kreckel's ideas that exclusion of permanent limitation of access occurs along the four dimensions of Social inequality, viz. material wealth (imparted via "money", symbolic knowledge (imparted via "certificates"), hierarchical position (imparted via "rank"), and selective association (imparted via "affiliation").

TuW02:5 Identifying organization of work research needs for women

Naomi Swanson, Gwen Keita, and Jeanne Stellman National Institute for Occupational Safety and Health; American Psychological Association; Columbia University, USA

Organization of work is currently undergoing rapid and dramatic changes, the effects of which on the health and safety of workers are largely unknown. This is particularly true for women workers, who until relatively recently, have not been studied as intensively as male workers. Labor statistics in the U.S. reveal a number of trends, which may have negative effects on the health of women workers. For example, there has been a rapid increase in temporary workers over the past 15 years, and young women are disproportionately represented among these workers. It has been postulated that temporary workers face increased risk of injury or illness due to inexperience or lack of safety training. Yet, there has been virtually no research on health and safety among temporary workers. Little empirical research exists on telecommuting and homework as well, which, while offering more flexibility and control over family obligations, may create insufficient separation between the work and family spheres.

In 1996, the U.S. National Institute for Occupational Safety and Health (NIOSH), and its partners from the occupational safety and health community, launched the National Occupational Research Agenda (NORA). Organization of work is one of the 21 priority research areas identified by NORA, and team efforts have included the development of a research agenda for this area. Prominent among the research gaps in the agenda is those of particular relevance for women, such as those mentioned above. The presentation will provide a more in-depth discussion of the organization of work research agenda and its relevance to working women.

TuW03, Musculoskeletal Disorders

TuW03:1 Men and Women at Work: Do they Differ in Jobs, Tasks and Task Performance, and what are the Consequences for Exposure to Work-Related Physical and Psychosocial Risk Factors?

W. E. Schimmel, A. J. van der Beek, and W. van Mechelen Department of Social Medicine, Institute for Research in Extramural Medicine, VU Medical Center

Introduction:

In The Netherlands, the risk of getting disabled for work is more than two times higher for female workers than for male workers. This literature review looks into three possible reasons for this striking discrepancy, i.e. differences between men and women in: 1) the jobs they hold, 2) the tasks they perform within the same job, and 3) the way they perform the same task. Attention was paid to the consequences of gender differences for exposure to both work-related physical and psychosocial risk factors.

Methods:

A systematic literature search was performed in multiple electronic databases (CINAHL, PubMed, Biological abstracts and Ergonomic abstracts) with various combinations of the following entries: sex (factors), gender, women, female, occupation (al health), job (title), work (technique), task (performance), ergonomics and (task) specificity. Furthermore, a search for literature that referred to the identified studies was performed, and the references of the articles were checked for relevant literature.

Results:

Sixteen studies were found about gender differences in jobs; they all show that men and women hold different jobs. Differences in tasks within the same jobs were examined in 10 studies. The results show that men were more likely to perform tasks, in which physical strength was needed, while women more often performed tasks requiring precision. Because of these clear gender differences in jobs as well as in tasks within the same job, males were more often exposed to heavy physical work, a well-known risk factor for back disorders. Repetitive movements, a risk factor for upper-extremity disorders, were more common among women. Psychosocial load was found to be higher for women than for men. There was some evidence for gender differences in the physical load while performing the same task. However, the 9 studies that were found were not clear as to whether the load was higher for men or for women. No studies were found regarding gender differences in psychosocial exposure while performing the same task.

Conclusion:

Due to differences in exposure to physical risk factors women seem to have a higher risk of upperextremity disorders, while typical male exposures might increase the risk of back disorders. Exposures to psychosocial risk factors were generally higher for female workers than for their male counterparts.

TuW03:2 Do Women and Men in same Jobs have different Physical Exposures at Work?

O Leijon ^{1,2}, E Bernmark ², L Karlqvist ³, K Messing ⁴, C Wiktorin ^{1,2}, A Härenstam ³, and the MOA research group

¹ Division of Occupational Medicine, Department of Public Health Sciences, Karolinska Institutet, Stockholm, Sweden, ² Department of Occupational Health, Community Medicine, Stockholm, Sweden, ³ National Institute for Working Life, Stockholm, Sweden, ⁴ Centre pour l'étude des interactions biologiques entre la santé et l'environment (CINBIOSE), Université du Québec, Montréal, Canada

The present study is part of the Swedish MOA study (Modern work and living conditions for women and men. Development of methods for epidemiological studies), performed 1995-1997 in five Swedish counties.

Aim: The principal aim of the present study was to investigate if there are gender differences regarding ergonomic/physical exposures at work among women and men in the same job.

Material and methods: The study included 31 matched pairs (n=62) of one man and one woman. Each pair worked in the same work place and had the same job-title and qualification level of work. Eleven pairs worked in female dominated, 13 pairs in male dominated, and 7 pairs in gender mixed occupations. The data collected comprised self-reports (questionnaires), interviews, diaries, observations, and direct technical measurements. Paired Sample t-tests were used for the statistical analyzes.

Results: The men had a higher proportion of work time with arm elevated >60° (p ,019). There was a tendency, though not statistically significant, that the women had a higher proportion of work time with repetitive tasks/movements compared to the men (p ,092). There were no gender differences regarding proportion of time spent sitting or standing/walking work postures or frequency of changes between these work postures. Further, there were no differences concerning proportion of time with VDU work. There were no differences between the women and the men regarding energetic or metabolic load at work, nor concerning perceived physical exertion (RPE).

Conclusions: Women and men in the same work place with same job-title and qualification level seem to have similar physical exposures at work in many respects. Despite the matching procedure the tasks performed by the two members of each pair were necessarily not the same. The women in this study tended to perform more repetitive work tasks/movements compared to the men. The results of the present study indicate that gender specific exposure analyzes in work place investigations sometimes are needed, at least regarding arm postures and arm movements, even if men and women seem to perform the same job.

TuW03:3 Health Outcomes for Men and Women performing the same Type of Work tasks

Dahlberg R, Karlqvist L, Bildt C, Nykvist K. National Institute for Working Life, Stockholm, Sweden

Introduction: Musculoskeletal disorders are more common among women than men (1,2,3). This can be supported in studies of the general population as in different occupational groups, but the cause of these differences are not always obvious (1). One problem in these studies is that men and women seldom are performing the same type of work tasks (1,3).

Aim: The aim of this study was to compare men and women's working conditions and health outcomes when performing the same type of work tasks. Of special interest was to compare the musculoskeletal health. Another issue of interest was to compare, working technique, postures and natural breaks during work as well as leisure conditions.

Method: In the present ongoing case study, three types of data collection methods have been used. 1. Questionnaire, 2. Interviews and 3. Observations. Sixty-one blue-collar workers (38 men and 23 women) in a manufacturing industry in a provincial town in Sweden participated in the study. The women were in average older than the men (39 and 33 respectively) and had a longer work experience (12 years compared with 8).

Results: The results from the questionnaire showed that women reported significant more symptoms from the shoulders and also more symptoms from neck, thoracal back, wrists/hands, hip's and feet's. It was more common among the men with low back symptoms. No significant gender differences could be noted in psychological well being or in different stress symptoms. The results from the interview showed that no gender differences were evident concerning relations and contentness with supervisors and colleagues. Women perceived their work as significantly more physically heavier than men but no gender differences could be noted in perceived mental stress. Women spent significantly more time with home- and household work (i.e. washing up, preparing food, laundry work, shopping, taking care of children, car-maintaining, house-reparations) than men. About 2/3 of the women were married or lived together with another adult compared to 1/3 of the men. 72 % of the women had children living at home compared to 29 % of the men. Results from the observations will be presented at the conference.

Discussion: The case study showed that women reported more symptoms from the musculoskeletal system than men even though they had the same type of work tasks. Other factors of importance in developing musculoskeletal symptoms than a more traditional biological explanation model were found. Work place- and hand tool design may be factors that can explain a higher degree of symptoms from the upper extremities among the women. The fact that the women in average were older than the men and also had a longer work experience may also be factors of importance. An issue of interest that indicate a higher total workload for women could be that they spent significantly more time with standing home- and household work. One exiting question that still remain: Are there differences in working technique, postures and natural breaks between men and woman, and if so, can that be factors of importance to the health outcomes?

References:

1. Kilbom Å and Messing K (1998). Work-related musculoskeletal disorders. Women's Health at Work (Kilbom Å, Messing K and Bildt Thorbjörnsson C eds) pp 203-227

- 2. Punnet L and Herbert R (2000). Work-Related Musculoskelal Disorders: Is there a gender differential, and if so, What does It Mean? Women and Health (Goldman M and Hatch M eds) pp 474-492
- 3. de Zwart BCH, Frings-Dresen MHW, Kilbom Å (2001). Gender differences in upper extremity musculoskeletal complaints in the working population. Int Arch Occup Environ Health 74: 21-30

TuW03:4 Work Related Musculoskeletal Disorders Among Bank Workers in Brazil

Maria de Fatima Marinho de Souza; Guilherme Rodrigues da Silva Preventive Medicine Department - Medical School - University of Sao Paulo (USP) - Brazil

The authors studied Work Related Musculoskeletal Disorders (WRMD) among 643 employees at a public bank organization in Sao Paulo City, Brazil. Trained interviewers obtained by means of a standardized questionnaires data concerning symptoms (Nordic Questionnaire) and biological, psychosocial, and domestic workload as well as work environment conditions.

A total of 134 subjects were randomly selected for a medical examination in order to evaluate the accuracy of the questionnaire approach.

Using principal component analysis a great number of variables was reduced to scores in a small number of factors. Preliminary analysis focused on the bivariate relation between independent variables and WRMD. Subsequently, variables shown a significant association ($p \le 0.20$) were entered into selected multivariate regression models. The ultimate option was to use a generalized linear model to transform prevalence data into incidence information.

The authors observed a prevalence of 32.1% and 44.4% by the medical and questionnaire evaluations, respectively. When comparing men and women the prevalence was higher for women. However, controlling for other risk factors removed that difference. The overall estimates of the base-line incidence per 1,000 were 36.1 (crude) and 17.0 (adjusted by controlling for the covariates in the model); for females the rates were higher (crude=47.5; adjusted=19.0) than men (crude=22.4; adjusted=14.2).

The outstanding risk factors were bad-work station (RR=4.3), average-work station (RR=3.1); bad-work tools (RR=1.9); very high work-speed (RR=2.9), high work-speed (RR=1.9); age 40+ (RR=0.3), age 30-39 (RR=0.4); height < 1.6m (RR=1.9); low job-satisfaction (RR=1.6); participation in work control (RR=0.84; linear trend p=0.046); and low work-place temperature (RR=1.4).

The adjusted risk for women shorter than 1.6 M was 1.70 and the risk for men shorter than 1.6 M was 1.16.

TuW03:5 Ergonomic Analysis Of Working Positions And The Musculo-Skeletal Disorders In Shoes-Female Workers

Khan van Duong

National Institute of Occupational & Environmental Health 1B Yersin Street Hanoi- Vietnam

By cross-sectional study design, the research work was taken into account to analyze ergonomic of working conditions and the musculo-skeletal disorders on 240 shoe-forge female workers. The result showed that although many machines were equipped, most processes have to be operated manually. Many working positions were arranged irrationally e.g. chairs were too high (66-67 cm),

drying supports were too high (131.5.-179 cm), which were not suitable for Vietnamese dimensions causing the awkward working postures (bending, twisting, reaching up) for workers. The operation frequencies in some processes were very high (35-45 times/min) and monotonous. Furthermore, the workers have to work with rather heavy shoes-form (1200-2000gr) with 2500-3500 shoes/workshift, so they had to make large efforts. It is considerable that the efforts mainly were made by hand and forearms.

After working day 85,4% workers complained of musculoskeletal disorders. The high percentage of complaints were in lowback (55%), shoulder (48,8%), wrists (37,1%), hand (23,9%). The relation between the complaints and work characteristics were clearly manifested when comparing the percentage of musculoskeletal disorders among five groups.

Some recommendations were suggested in order to reduce the hazards of occupational factors on musculoskeletal disorders for workers.

TuW04:Burn-out, Work-stress and Health

TuW04:1 Women Workers in Electronics Assembly: Work, Stress and Health

Angela E Calverley, D Rees)

National Centre for Occupational Health and School of Public Health, University of the Witwatersrand, Johannesburg, South Africa

Introduction: In South Africa the assembly of appliances and devices employs more women than other work, in the rapidly growing electronic industry. Occupational health effects are well documented in the industry.

Objective: A holistic evaluation of the environment and health hazards at work, and the domestic lifestyle of women assembly workers.

Method: A descriptive cross-sectional survey of a medium scale enterprise, and 90 women involved in the assembly of an electronic device. The workplace was subjected to occupational hygiene evaluation. Questionnaires on self-reported health problems, domestic arrangements, and psychosocial stress were administered to workers. Follow-up respiratory and dermatological medical evaluations were conducted where necessary.

Results: Workplace hazards included exposure to colophony in soldering fumes and low levels of mixed solvents, ergonomically incorrect workstations and general stress at work. Seven workers were diagnosed with asthma, and one with dermatitis, induced by colophony. Work related musculoskeletal pain, reported by 27 workers was associated with work type (repetitive, with limited movement) and dissatisfaction with work content (not interesting or challenging), but not significantly with domestic stress, despite difficult lifestyles.

Conclusion: Workplace exposures were corrected, and advice given on adaptation of workstations, to remedy physical health hazards. However, the stress of monotony could not be relieved; together with resulting pain this becomes a way of life for an expanding sector of blue-collar women workers.

TuW04:2 Gender, Stress, and Health and Well-Being in Customer Service Employees

Paula L. Grubb, Naomi G. Swanson, Christina A. Beam, W. Stephen Brightwell, Robin Dunkin, Shirley A. Robertson, and Judith D. Riley National Institute for Occupational Safety and Health

Recent research on job stress has shown that working women are now exposed to the same occupational hazards as men, but are also subject to gender-specific job stressors (e.g., sex discrimination, etc.) that can negatively impact health and safety. Demographic information regarding customer service work indicates that these jobs are predominantly staffed by women. The current study provides a unique opportunity to examine differences between men and women in terms of job demands, stress, and health and well-being outcomes in large customer service call center operations.

Data were collected at 15 U.S. call centers and the participants were 4695 customer service representatives (3247 women, 1448 men). Participants completed a survey on job stressors, working

conditions, and health and well-being. The return rate ranged from 75% to 90% at the 15 call centers. Job tasks and responsibilities were identical for the two genders. The present study examined the gender effects in terms of the relationship between job demands and job stress, job satisfaction, motivation, commitment, and health.

Overall, women reported higher levels of fatigue, time pressure, workload, job control, and skill usage than did their male counterparts. Women reported higher levels of job stress, but also reported being satisfied with their jobs to a greater degree than did men, and as being more highly motivated and committed to doing their jobs well. Men, on the other hand, reported higher degrees of supervisor support and of role conflict.

Stepwise multiple regressions were performed separately for men and women using job demands as predictors for the outcomes of interest. Demographic and job description variables were forced into the model first as control measures. Results of these analyses indicate that for both men and women work climate or culture was the strongest predictor of job satisfaction, health, motivation, job commitment, and mood, while time pressure was the primary predictor of job stress.

However, lack of job control and work backlogs were important predictors of job stress for women, but not for men. For men, lack of decision making power was a significant stressor, but this was not the case. for women. With regard to job satisfaction, reduced time pressure and lower workload were significant predictors for women, but not for men, while co-worker support was a significant predictor of job satisfaction for men but not for women. These findings suggest that there are important differences between men and women customer service representatives in terms of what is a stressor on the job and with regard to what determines job satisfaction

TuW04:3 Burnout Syndrome and Chronic Fatigue Syndrome. Effects of Unemployment in Women's Mental Health

Esther Moncarz

National Women's Health Network, Buenos Aires, Argentina

According to a report from the International Labour Organisation (2001) a third of the world working population, formed by 3.000 million people, is unemployed or underemployed. As a consequence, they are searching for a job in order to change the situation for earning less than what is necessary to support their families over the poverty threshold.

Although the need of guaranteeing a decent job for all the employees is emphasised, actually current politics and the so-called labour flexibility produces:

- -An increase in unemployment and subemployment rates
- -A deterioration in the working conditions and the loss of social security benefits

With regard to women's situation, the same report states that they register unemployment rates higher than men's and when they are employed they usually are concentrated in less qualified jobs, receiving less incomes.

It is considered that in Latin America approximately one of five poor women that want and have to work cannot get a job in spite of looking for one actively.

In Argentina, the Finance Ministry has reported that women and young people of up to 29 years, are the most affected by unemployment. Half of the unemployed people are women and of the total amount that ere employed, 52,1% are affected by getting unstable jobs. The increase of the uncertainty to find a place and survive in the labour market makes people accept more and ore bad

working conditions in order to be part of it. The "acceptance" of this situation has changed the working conditions into a risk factor which turns them vulnerable to different pathologies.

In this paper from a gender point of view, we are going to describe some of the consequences regarding to the deterioration and reduction for the labour market and its effects on the mental health of some women's groups. We are going to analyse two specific forms in which labour stress becomes evident: burn out syndrome and myalgic encephalomyeltis (ME), due to the fact that they are considered a symptomatic result of the effort that represents to many women, who suffer this kind of symptoms to hold down their jobs.

We are also going to mention some of the implicancies and the impact of the unemployment in the life and mental health of the affected women. This information comes from my experience as psychologist in a mental health social security benefits company that gives assistance to different companies in the country. The goal does not consist on establishing generalisations but to contribute with some concepts about the consequences in health and the current working conditions of many women in Argentina.

TuW04:4 Psychosocial aspects among women engaged in interactive computertelephone tasks in the call center of a bank, located in Brazil

Débora Miriam Raab Glina, Reference Center for Workers' Health of Santo Amaro, L.E Rocha, University of São Paulo and Ministry of Labour, Brazil

Aims: To identify psychosocial aspects among women engaged in interactive computer-telephone tasks (operators) in the call center of a bank.

Method: Ergonomic work analysis, hearing of tapes of calls, interviews and 96 questionnaires answered voluntarily by the active operators.

Results: More females belonged to the age group from 18 to 23 years (67,4%). There were 12,6% above 35 years. 22,3% had children. It was a receptive call center. When there was not a queue, operators had to try to sell bank products.

Job description: 6 hours shifts, with 1 break lasting 30 minutes, 90 to 150 calls per operator daily, 95% of the time, operators typed on the keyboard and answered phone calls.

Psychosocial factors: The job was considered without qualification, repetitive and unimportant by the bank. Aims: to open 4 new accounts monthly, medium time of attendance of 2 minutes, to sell bank products. The performance appraisal took in account the performance during on line monitoring (hearing phone calls of each operator), time spent out of the workstation, selling, medium time of phone attendance, absences, delays, mistakes and bank losses. The consequences of the performance appraisal could be firing (when bad) or transfers for other sections of the bank (when good). 95,8% reported that the work caused stress or strain and for 27,4% it happened always. The research found out that the main risk factors for stress were: 1) The impossibility to answer phone calls with the quality demanded by the bank considering the medium time established for phone attendance. Each client could demand up to 10 information/operations per call. 58,3% of the operators considered that they lacked control over their work; 2) Great amount of information in constant change to be dealt concerning bank products and services. This information was not easily available and training did not happen with the needed frequency. Moreover, it was forbidden to write (using pen and paper) during work time; 3) The queues of clients, which happened on Mondays and Fridays, first fifteen days of the month, before and after holidays, early in the morning and in the evening. The queue led to overtime and intensification of work. 70,5% of the operators

reported that they worked at fast pace; 4) difficult relationship with clients, who showed aggressiveness, ill treatment and sexual harassment. This problem could be related to repetitive scripts which were difficult for the clients to understand, out of date data about the account, slow system, time needed to access screens, information about bank products reached first the clients, the constant attempt to sell bank products.

Protective factors: Supervisor and colleagues could diminish the impact of the above mentioned factors and play a very important role in the prevention of stress. 70% of the operators considered the support offered by supervisors and colleagues satisfactory.

Mental Health: The reported consequences were insomnia (29,5%) and depression (32,6%). *Conclusion:* The following measures are recommended: increase of job control, improvement of workstation and equipment ergonomics, support for supervisors and operators, establishing reasonable production standards, improvement of system, scripts and screens.

TuW04:5 Work-Related Problems in a Sample of Iranian Nurses

M. A Besharat University of Tehran, IRAN

Work-related problems were studied in a sample of 180 Iranian nurses. Self-reported questionnaires were carried out to detect symptoms of stress, anxiety, depression and somatic complaint. The results revealed that subjects consider their main work-related problems to be musculoskeletal back pain, followed by stress, anxiety and depression. These problems were shown to be significantly associated with psychosocial and organizational factors at work. Results and implication are discussed. This paper concludes that there is a need for urgent action in research, interventions and education.

Key Words: work-related problems, musculoskeletal pain, psychosocial factors, organizational factors.

TuW05: Agents and Activist for Change NGOs

TuW05:1 Equal Opportunities within Employment

Martha Koome (author) Federation of Women Lawyers of Kenya

The Federation of Women Lawyers of Kenya: Fida-Kenya is a non-governmental women lawyers membership organization. We have about 400 members.

Our main vision is to help create a just society that is free from discrimination against women. We envisage a world in which women and men shall live in harmony as equal partners and where democratic values of justice, fairness, transparency and meaningful citizen participation shall flourish.

We realize our vision through:

Provision of legal aid to indigent women and on matters of public interest.

We create awareness of legal rights and educate women on how to claim their rights in court.

We research, monitor and report women's rights violations.

We lobby and advocate for reform of laws and policies that discriminate against women.

Through our programs, we have initiated an Equality Bill that tends to outlaw all forms of discrimination and affords equal opportunity to all Kenyans. We would like to share our experiences of the Kenyan situation on the following sub-themes:

- (1) Gender inequality at work and at home.
- (2) Policies, legal systems and economic aspects of women, work and health
- (3) Effects of domestic violence on women's possibilities of working.

Our Kenyan society is primarily patriarchal. Men are heads of family and perceived as the breadwinner, trustees of the family heritage and decision-makers.

Kenya became independent in 1963. Prior to that, Kenya was part of the British Colony and inherited British Colonial Laws that discriminated and relegated women to second class citizens. Although women fought for independence alongside the men, come independence they were relegated to the periphery. Women are only a tiny portion of the country's policy-makers, decision-makers or lawmakers. Since independence only a handful women have been elected to the Kenyan Parliament.

Poverty: Women form at least three quarters of the country's poor. More female-headed households in Kenya are poor or very poor as compared to male-headed households.

Employment: Women professionals are relatively few and even so, their upward mobility is limited as they are seldom promoted. Most of the managers in offices and factories are men. Women in formal employment usually have lower paying and less prestigious jobs than men, with little chance of career development or promotion. The terms of employment discriminate women especially the issues of maternity leave.

Health: Most women do not have equal opportunities to protect, promote and maintain their health, including control of their reproductive health and fertility. The rate of maternal deaths has been increasing rather than decreasing in recent years. The laws on medical care make married women dependent on their husbands.

TuW05:2 The Code of Practice on Sexual Harassment at the Workplace : A Gain or a Compromise?

Maria Chin binti Abdullah Women's Development Collective. Malaysia.

Sexual harassment in the workplace, once viewed as a private annoyance or harmless sexual act has now entered the public domain, and acknowledged as a serious misconduct. Studies in Malaysia have found that women experience a disproportionately higher rate of sexual harassment, with survey figures ranging from 40 percent to as high as 88 percent of female employees reporting sexual harassment on their jobs by their male colleagues or supervisors. However, the current situation is also changing as more men also report sexual harassment.

Driven by the relentless campaign of women's groups and trade unions, sexual harassment is also publicly accepted as a form of gender discrimination and a violation of human rights, both at the national and international level. All over the world, sexual harassment in the workplace has been addressed through various approaches, from anti-discrimination or labour laws to specific legislation and to Codes of Practice. At the United Nations level, the 1995 Beijing Platform of Action has noted sexual harassment as a form of violence against women, calling for member states to take measures to actively combat this act of violence.

However sexual harassment has not been articulated as a social phenomenon, nor has it been institutionalised until very recently. There has not been many studies on sexual harassment in Malaysia. Therefore, in September 2000, two women's organisation, the All Women's Action Society (AWAM) AWAM and the Women's Development Collective (WDC), embarked on a nationwide study with the aim of contributing towards the debate on sexual harassment. The impact of the implementation of the Ministry of Human Resources Code of Practice on Sexual Harassment at the Workplace was the focus of the study. It has the following objectives:

- 1. To gauge the extent of sexual harassment in the workplace;
- 2. To assess the perceptions of sexual harassment in the workplace; and
- 3. To review the progress of the implementation of the Code of Practice on the Prevention and Eradication of Sexual Harassment in the Workplace

The findings of the study will be shared at the Conference and it will cover the following areas:

- 1. Incidence of Sexual Harassment
- 2. Differential Gender Perceptions
- 3. Policy Impact
- 4. Confidence in Complaints Procedure
- 5. Application of the Ministry of Human Resources Code of Practice
- 6. Recommendations for a Good Practice Model

Lessons Learnt from Women's Organisation's Engagement with the State

I will conclude by evaluating the gains and compromises made by women NGOs in their engagement with the Malaysian state in their quest for better the health and safety conditions for women, in the context of sexual harassment in the workplace. This is analysed in the context of a seeming increase in the opening of "democratic" spaces for progressive forces to determine the gender equality agenda. What is the next move forward for the state and women NGOs? What are the spaces available and how far can the democratic space be tested? Will it mean more gains or compromises in the contest for gender equality? What will be the role of the private sectors, who are key stakeholders in this struggle for control vs./and flexibility in dealing with sexual harassment?

TuW05:3 A gender analysis of organisational forms in the Thai electronics industries

Dr. Sally Theobald Liverpool School of Tropical Medicine

What organisational structures and processes can meet the multiple needs and interests of workers in the electronics industries in northern Thailand? The paper begins through discussing the international experience and progress to date of trade unions in the electronics industry. Debates by feminist critics and gender analysts about the capacity of trade unions to embrace women's women workers' multiple identities are then outlined. The roles of alternative organisational forms are explored together with issues of power, identity and representation. The paper then introduces the concept of a coalescing strategy that builds upon and recognises the clear continuum between many areas of women's lives and provides space for networking, linkages and alliances between workers and non-worker groups in local, national and international contexts (Chaachi and Pittin, 1996).

Drawing on 16-months participatory and qualitative fieldwork the paper applies the concept of a coalescing strategy to developing organisational forms, for and of workers, in and around the Northern Regional Industrial Estate in Lamphun, northern Thailand. There are no trade unions in Lamphun and currently two organisations exist to promote the needs of workers and strengthen their voice in demanding positive change in working conditions and experiences: The Friends for Friends Club and the Lamphun Women's Health Centre. Within a coalescing strategies framework the paper outlines the strategies, practices, successes and challenges facing these organisations. The paper concludes with a call for the ongoing development of structures, which enable the growth of participatory alliances between heterogeneous actors at local, national and international levels.

TuW05:4 Empowering women to change their outlook in life and in society

Valli Alagappan Chennai, India

Economic dependence, poor earning capacity, ignorance and absence of basic health needs are the usual problems faced by majority of women in a male dominated Indian society. This problem is magnified in lower socioeconomic groups. In an attempt to bring about a change in the lives of women living under poverty line and to empower them, we established a Community Health Center (CHC) in Arakkambakkam, a rural village in the outskirts of the metropolitan city – Cheenai in Southern India. Through this pilot project, we adopted 12 villages in and around CHC.

Better health through health education: Treatment of diarrhea with commonly available ingredients, coping with anemia in pregnant and adolescent women, anti-natal and post natal care, training of local village midwifes using sterile methods and emphasis on the need for preventive inoculations were our main focus. The community was educated on the ill effects of alcohol abuse and the women were advised how to help their men overcome this problem. We counseled that women are not only childbearing machines.

We helped to set up Women's Groups to achieve economic independence: Training is given in tailoring, first aid and small-scale village crafts. The women are taught to set up their own kitchen gardens to augment their dietary needs.

Since the women are usually daily wage earners, we faced initial opposition from the men. They resented the drop in wages if the women came to the Centre even for a couple of hours. Since the

liquor shops are now places far from the homes due to protest by these well informed women and the women are economically more independent, there is some resentment from the male population.

During this pilot phase of 30 month, no deaths are reported due to diarrhes. Family size is now smaller and the 2-child norm is common. Anemia is no longer a major problem. Babies born in our Centre where anti-natal care has been given, achieve a birth weight of 3 kgs. or more.

With request from the villagers to do ore for their health care and for self-employment training, the CHC is growing in leaps and bounds and we are encouraged to embark on more new projects.

TuW05:5 The Strategy and Practical Role of Ngo In Working Women's Health Promotion

Lidia Simbirtseva Lifestyles International Institut , St Petersburg, Russia

In the work of advocacy and supporting working women's health promotion NGO proceeded from the following principles:

A social view of health; health of women counts not only for individual woman, but for her family, children and the next generation; women's behavioral related problems touch fundamental questions of the human community such as the meaning of life, death, reproduction, happiness, self-humiliation, aggression; a life span perspective; promoting women's participation in health decision-making; women's need for accessible and appropriate information; the education among women is much more important in spite of the shorter life expectancy from birth by men. Women engage with the health system through multiple roles they make up the majority of consumers (with an interest in effective and responsive services; the majority of carers (with an interest in good information and partnership with health system); the majority of health workers (with an interest-incaring-and learning organizations): the majority of citizens (with an interest in accountable and equitable systems, as well as social and economic policies, more broadly).

The chief things in our activity we consider as follows:

influence on the governmental policy for implementing a comprehensive policy of working women's health promotion, including occupational health; information through the wide range of possibilities, including radio. TV and MM; education - in the postgraduate studies for adults in family, in community; and connection with national and international organisations as a source of a new knowledge, new enthusiasm and inspiration.

TUS01: A new Economy? Processes of segregation and integration

Chair: Lena Gonäs

Organiser: Karlstad University

TuS01:1 A new Economy? Processes of Segregation and Integration

Lena Gonäs

Karlstad University and National Institute for Working Life, Stockholm

This symposium will give examples of segregation and integration processes in different types of organisations, in both the socalled new economy and in more traditional production sectors. The aim of the symposium is to explore implications of gender segregations and possible openings for integration at different levels of the economy. One important issues is how to measure and evaluate processes of change. Do we have proper tools for measuring segregation and integration patterns and changes over time, is a question that is going to be discussed.

The first paper will give examples of gendered employment practicies in different types of organisations in media industry, care work and refuse collection.

The second paper focus on relations between gender and segregation and how the interaction between these them can be understood when studying specific organisations. Three sets of relations are interpreted; gender, power and the division of labour.

discuss the concept of segregation, and methods

TuS01:2 Gendered divisions in the new economy

Diane Perrons, Róisín Flood London School of Economics UK

Given the diverse nature, varied understandings and different claims made about the new economy, this paper seeks to empirically explore gendered employment practices at opposite ends of the hierarchy: new media and carework and refuse collection, in one local labour market.

New media employees/freelancers are generally highly qualified professional who experience highly pressurised working patterns, individualised systems of pay determination and continuing gender segregation, all issues traditionally of trade union concern yet this population rarely, if ever turns to trade unions for support. This paper explores what role trade unions might play in this context, whether alternative forms of representation have developed to deal with their concerns.

Careworkers and refuse collectors by contrast are more likely to be unionised, but generally have few formal skills and qualifications and their working conditions have recently been adversely affected by the private finance initiative (a contemporary form of privatisation). The paper will explore the effects of this initiative on working conditions and systems of representation. It will also

explore the differential treatment of and response by these different groups of workers characterised by high levels of gender segregation (women careworkers and male refuse collectors). On a more conceptual level the paper will explore the continuing foundations and implications of gender segregation at different levels in the new economy.

TuS01:3 Measuring Gender Segregation

Ruth Emerek Denmark

Gender segregation is a prevailing characteristic of European labour markets and desegregation has become one of the main objectives of the European action programme for equal opportunities and is considered an important task of the European Employment Strategy. The discussion of segregation and the levels of segregation are however based on measurement, which are open to discussion and critic. A recent study for the European Commission's reveals that none of the measures generally used are perfect, and that the special measure used by the Commission even involves a paradox, as less dissimilarity over occupations combined with a higher proportion of women in employment may result in a higher measure of segregation (Emerek, Figueiredo, González, Gonäs and Rubery, 2001). The methodology should thus be improved or developed and at least discussed.

It is also important to question and discuss the concept of gender segregation. Segregation is a result of multidimensional process, and the question is if segregation a problem, and if so why? One standpoint is that gender segregation reveals real gender differences, indicates discrimination towards women in the male-dominated labour market, and is a most important cause of wage differences. Another standpoint is that gender segregation would be no problem, if women and men hold the same wage for equal work or work of equal value and the same working conditions. Segregation is mainly seen as a result of a different choice of trade and profession between women and men, and it is (from this standpoint) questioned if gender segregation only is a disadvantage.

Segregation should at least be studied in interaction with time and place as well as in interaction with the scale of women's employment and unpaid work. Differences in gender segregation in various labour markets cannot be discussed without including a discussion of differences on the scale of women's employment and the division of work in households - that is the gender segregation in caring, maintenance and bread-winning. Other important dimensions are the difference in segregation for different generations and educational levels. The process of occupational integration and how new gender divisions in work places subsequently develop should be a main objective for more intensive future research of segregation - including longitudinal studies of occupations.

There is (according to generally used measurement) evidence of a desegregation process in labour markets over time. The long-term development is however a very slow process of desegregation. The continuation of gender segregation can of course be linked to differences in women and men's choice of education and career path. Some countries, such as Denmark have tried, but with little success to pilot women's choice of education into male-dominated areas. The Danish labour market remains, however, still highly gender segregated. *This paper* discuss the problem of segregation, the concept of segregation and the methodology of measuring segregation using an ongoing study of the Danish labour market. It compares horizontal as well as vertical segregation over generations and education using a highly differentiated occupational classification system.

Litt: Emerek, Ruth, Hugo Figueiredo, Maria Pilar González, Lena Gonäs and Jill Rubery (2001), Indicators in gender segregation in Rubery, Jill et all (eds.) *Indicators on Gender Equality in the European Employment Strategy*, EGGE – EC's Expert Group on Gender and Employment, http://www.umis.ac.uk/ewerc/egge/egge_publication/indicators2001

TuS01:4 Gender, Power and Division of Labour Patterns of Gender Segregation in Working Life

Ann Bergman Sweden

The paper aims to discuss gender segregation as I have tried to understand it in an ongoing empirical study.

The study itself can partly be seen as a form of critique of the official political equal opportunity debate and guiding principles in Sweden. Equal opportunities policies in Sweden have quantitative as well as qualitative aspects, but it tends to be a bias towards the quantitative dimension when it comes to gender politics. While the qualitative aspect implies that women's knowledge, experience etc. should be given equal weight to men's, the quantitative aspect implies an equitable distribution of women and men in all areas of society in general and in working life in particular. The quantitative aspect consist of arguments that an equal number of women and men in different areas will result in equal conditions – i.e. opportunities and strains – but there is hardly any empirical research that confirms this. I take this for a call to study segregation and non-segregation in working life and to examine its consequences for women and men.

I will therefore focus on the relations between gender *and* segregation and how the interaction between them can be understood when looking at its observable patterns on an organisational level.

My point of departure is on the one hand a theoretical discussion of – what I se as – indispensable structural components in gender segregation in wage labour. I concentrate on three sets of relations, gender, power and the division of labour. The theoretical argument will also embrace a number of mechanisms that are of importance for our understanding of how it works when gender segregation is reproduced in working life. On the other hand my point of departure is the observable patterns of gender segregation in the three work organisation that are studied by quantitative data (archival and survey data) on both organisational and individual level.

I try to link the theoretical standpoints to the observable patterns by discussing different types of gender segregation as such, namely job segregation, hierarchical segregation and departmental/work group segregation, but also how they are related to each other. When examining the relations – i.e. the patterns – and what characterises women and men and their positions there are possibilities to identify mechanisms of importance for the reproduction and transformation of gender segregation. There are also possibilities to compare the male dominated, female dominated and integrated areas, jobs or hierarchical positions. While doing that I will show that gender equality is not necessarily the outcome of an equivalent number of women and men. And more important: Since segregation sometimes takes place within integration and vice versa, an analysis of women's and men's working conditions is crucial for our understanding of the reproduction and transformation of it.

TuS01:5 Labor market inequality, past and future: A perspective from the United States

Chris Tilly

Dept of Regional Economic and Social Development, University of Massachusetts-Lowell

The standard, *efficiency-driven* economic narrative of labor market inequality holds that such inequality results straightforwardly from the interplay of supply and demand in a market for individual skills. But much social science research points to a very different, *socially driven* account of labor market inequality. Norms and stereotypes channel action in labor markets. Power disparities and the imperatives of organizational maintenance decisively shape labor market outcomes. Labor markets are constructed not simply of striving individuals, but of pervasive networks.

I review two bodies of evidence about labor markets in the United States that offer a test of the relative validity of these two views of the labor market. First, I examine how racial inequality in the labor market has changed over time. Second, I look at differences across cities in class, gender, and racial gaps in earnings. In both cases, the socially driven model offers more satisfactory explanations.

After briefly addressing the generalizability of these U.S.-based conclusions to other parts of the world, I turn to predictions for future trends in labor market inequality. The efficiency-driven approach contends that the labor market has largely shed, and will continue to shed, distinctions of race, ethnicity, gender, and caste, and that the future will be determined above all by the evolution of technology and of skill development systems. The socially driven view, to the contrary, holds that categorical distinctions reappear in new forms, and that technological choices are a result as much as a cause of social arrangements. I distinguish between the *ranking* of jobs and the *sorting* of people among jobs and employment statuses to explore the further implications of a socially driven perspective.

TUS02: Psychosocial working conditions and health in a gender perspective

Chair: Per-Olof Östergren

TuS02:1 Psychosocial Working Conditions and Health from a Gender Perspective

Per-Olof Östergren Lund University

This symposium brings up several gender-related issues concerning psychosocial stress exposure at work, measured by the demand/control instrument:

- 1. Is the demand/control instrument adequate for assessing increased risk for work-related ill health among women?
- 2. Is the demand/control instrument relevant for making comparisons of work-related health risks between men and women?
- 3. Do women react differently than men, when exposed to the different patterns of psychological job demands and job decision latitude?
- 4. What are the opportunities and limitations of the research results derived from the demand/control model, regarding working life policy matters?

TuS02:1 The interplay between work-related and non work-related psychosocial factors and the risk for sickness absence among middle-aged women with common symptoms.

Gunilla Krantz, Per-Olof Östergren Nordic School of Public Health, Göteborg, Department of Community Medicine, Lund University

Background: This study investigated if a high level of commonly experienced physical and mental symptoms could predict long spells of sickness absence in Swedish women. A further aim was to investigate the causal pattern of socio-economic and psychosocial factors in relation to long spells of sickness absence.

Methods: A questionnaire containing items on socio-economic and psychosocial variables was sent to a random population of women, 40 to 50 years of age, living in a rural Swedish community. The response rate was 81.7% (397 women). Data on long spells of sickness absence (>14 days) for the year following the baseline survey were obtained from the social insurance office. Odds ratios (OR) were used to estimate bivariate associations. Multiple logistic regression analysis was used to test for confounding and effect modification.

Results: Women suffering from a high level of common symptoms were at risk of subsequent long spells of sickness absence, OR=2.95 (1.60-5.44). High demands at work and an active job position (i.e. the combination of high demands and a high degree of job control) were both associated with long spells of sickness absence, OR=1.97 (1.02-3.82) and OR=2.16(1.12-4.15), respectively. The combined exposure (high level of common symptoms and an active job position) increased the odds for long spells of sickness absence (OR=9.17; 3.41-24.67) with synergy noted.

Conclusion: The finding that women with symptoms from multiple locations are at risk of future sickness absence is of particular importance in a primary health care setting. The risk for women in active job positions to become sick-listed might be an effect of modern working conditions for women, and this needs to be further investigated.

TuS02:3 Incidence of shoulder and neck pain; different patterns of risk between men and women regarding work-related factors. Results from a one-year follow-up of the Malmö Shoulder Neck Study cohort

Ostergren P-O (1), Hanson BS (1), Balogh I (2), Ektor-Andersen J (1), Isacsson A (1), Orbaek P (2), Winkel J (3, 4), Isacsson S-O,(1) and The Malmö Shoulder Neck Study Group 1. Department of Community Medicine, Lund University, Sweden

- 2. Department of Environmental and Occupational Medicine, Lund University, Sweden
- 3. Department of Technology and Society, Malmö University, Sweden
- 4. National Institute for Working Life, Sweden

The impact of mechanical exposure and work-related psychosocial factors on shoulder and neck pain was investigated in a prospective study of a cohort of 4,919 randomly chosen, vocationally active men and women ages 45-64 residing in a Swedish city.

Neck and shoulder pain were determined by the Standardised Nordic Questionnaire. Mechanical exposure was assessed by an index based on 11 items designed and evaluated for shoulder and neck disorders. Work-related psychosocial factors were measured by the Karasek and Theorell demand-control instrument. High mechanical exposure was associated with heightened risk for shoulder and neck pain among men and women during follow-up. Age-adjusted odds ratios (OR) were 2.17 (95 percent confidence intervals [CI]: 1.65, 2.85) and 1.59 (95 percent CI: 1.22, 2.06), respectively. In women, job strain (high psychological job demands and low job decision latitude) correlated with heightened risk (OR = 1.73, 95 percent CI: 1.29, 2.31). These risk estimates remained statistically significant when controlled for high mechanical exposure regarding job strain (and vice versa), and for sociodemographic factors. Testing for effect modification between high mechanical exposure and job strain showed them acting synergistically only in women. A healthy-worker effect could not be excluded, which may have attenuated observed risk estimates.

TuS02:4 Work-related psychosocial factors and carotid atherosclerosis in a gender perspective.

MariaRosvall, P-O Ostergren, B. Hedblad, S-O Isacsson, L. Janzon, G. Berglund.

Department of Community Medicine, Lund University, Malmo University Hospital.

Purpose of the study:. It has been previously demonstrated that unfavourable workplace conditions are related to cardiovascular morbidity and mortality, but there is no agreement on the mechanisms by which this effect is mediated. To be able to better pinpoint the role of work environment in the earlier stages of cardiovascular disease process, we wanted to investigate the influence of work-related psychosocial factors on preclinical atherosclerosis.

Population and Methods: Cross-sectional data was used to examine the association between psychological job demands, job decision latitude, and carotid atherosclerosis in 2,658 vocationally-active Swedish men and women, ages 46-65, from the general population. Odds ratios of carotid plaque prevalence, determined by B-mode ultrasound, were estimated across combinations of job demands and decision latitude.

Results: Examined separately, high psychological job demands and low job decision latitude showed no statistically significant association with carotid atherosclerosis. However, when examined in combination, women in jobs with high demands and low decision latitude ("job strain") showed a high plaque prevalence odds (odds ratio [OR]= 1.68, 95% confidence interval [CI]: 1.14, 2.48). Men who reported high demands and high decision latitude ("active" jobs) showed low odds for carotid plaque, while, surprisingly, women in the same situation showed high odds. After adjustment for risk factors, the magnitude of these associations was only slightly reduced.

Conclusions: The results indicate an association between work-related psychosocial factors and pre-clinical atherosclerosis, showing different patterns in men and women, whereby other causal pathways than conventional atherosclerotic risk factors suggests to play a major role. Psychosocial factors at work and in the private domain and smoking during pregnancy

TuS02:5 Psychosocial factors at work and in the private domain and smoking during pregnancy

Elisabeth Dejin-Karlsson (1), Östergren P-O (2).

- 1. Department of Health and Society, Malmo University
- 2. Department of Community Medicine, Lund University, Malmo University Hospital

Study objective - To investigate whether psychosocial factors at work and in the private domain affect the tendency to quit smoking among women during their first pregnancy.

Design - The study is based on a cohort of primigravidas followed during pregnancy. Data were collected by selfadministered questionnaires during the pregnant women's' first antenatal visit at about 12 weeks. Psychosocial factors at work were assessed by the demand/control instrument, and in the private domain by an instrument assessing several types of social network/support factors.

Setting - The study was performed in the antenatal clinics in the city of Malmö, Sweden.

Participants - The participants were all primigravidas living in the city of Malmö, Sweden, over a one year period, 1991-92. A total of 872 (87.7%) of the 994 invited women agreed to participate. The study population included all primigravidas who at the time of conception were smoking (n=404, 46.3%).

Main results - At the first antenatal visit 63.6% (n=257) of the prepregnancy smokers were still smoking (a total smoking prevalence of 29.5%). The smokers were on average younger and had a lower educational level than those who had quit smoking. Significantly elevated relative risk (RR) of continued smoking was found among women exposed to job strain RR=2.3 (95% confidence interval (CI); 1.1, 4.8), those with a low social participation RR 1.6 (95% CI; 1.0, 2.7), low instrumental support RR 2.6 (95% CI; 1.2, 6.0) and low support from the child's father RR 2.1 (95% CI; 1.0, 4.2). These associations were independent of potential confounders such as age, educational level, nationality, cohabiting status, passive smoking, and previous years of smoking. No interaction in a synergistic direction was noticed between job strain and psychosocial resources

in the private domain, i.e. psychosocial assets in the private domain could not compensate for the effect of job strain.

Conclusions -In order to reduce smoking among pregnant women, maternity centre resources need to be focused more on women with a stressful work situation. It is also important to actively involve the woman's partner or other significant individuals in the woman's social network.

TuS02:6 Work situation in pregnancy and infantile colic

Catarina Canivet, Per-Olof Ostergren, Irene Jakobsson, Barbro Hagander Department of Community Medicine, Lund University and Department of Paediatrics, Lund University

In this population-based study we assessed the relationship between socio-economic and psychosocial conditions in 1094 pregnant women and subsequent infantile colic, by means of self-administered questionnaires, measuring exposures in the 17th pregnancy week, and telephone interviews at infant age 5 weeks.

There was a higher risk of colic in infants born to younger mothers, mothers with low instrumental support in pregnancy, and mothers with non-manual occupations. Having an "active" job situation, i.e. high demands and high decision latitude at work, acted synergistically with a non-manual occupation, yielding even higher odds ratios for colic.

So did concomitant low instrumental support and non-manual occupation. An expected synergy between low social participation and non-manual occupation could not be demonstrated. Findings from gender-related research may partly explain some of these results. Measures aimed at diminishing "role conflict" for women will be discussed.

TuS03: Union Policies for Increased Equality

Chair: Alicia Lycke

Organiser: The Swedish Organisation of Professional Employees

TuS03:1 Union policies for increased equality

Alicia Lycke TCO

TCO has in its reports over this year followed the development in the area of gender equality. A question that must be asked is whether existing political goals match the needs created by development.

One report shows that the professional development of men is favoured positively by them having children. This is especially true for men with older children. For women the fact of having children is seen as something negative in relation to their possibilities on the labour market. Our figures show that as many as 70 % that there is a negative impact for their chances on the labour market. It is still a fact that women to a great extent compromise by working part-time to be able to take greater responsibility for children and home. This also implies that they support their male partner's professional development.

One factor adding to the unequal sharing of responsibilities at home is the repartition of parental leave, where women even today undoubtedly take the biggest responsibility according to the TCO 'daddyindex'. It is very likely that it is in the course of these first years, when the children are small, that the unfair sharing of responsibilities assumes a permanent character. The unequal division of responsibilities at home is further strengthened by the fact that men with small children work more overtime than any others.

TCO has also studied the impact of family formation on male and female salaries. We have studied the development of salary levels for men and women who became parents for the first time in 1995. Vi have, on the one side, followed the development of salaries for these individuals before they became parents, from 1991 to 1995, and on the other side studied what happened to their salaries after they became parents starting in 1995 to 1999. The aim was to shed light on the constant question if women start losing in terms of salary when they get children.

TCO has also studied the size or amount of revenues for women and men in different family types over the years 1991 to 2001. In the study we controlled for age groups, educational levels and branch or sector of employment to avoid any bias from these factors on our results. We have concentrated our comparison on persons with and without children to see whether it 'pays' for men and women to form a family. The result shows that it was economically worth it while for men in 2001 to have children, while the opposite was true for women. Women without children have higher earnings than women with children have and men without children earn less than men with children.

What kind of development are we facing in a European perspective? Is it possible that gender equality is prevented by the way that welfare reforms and (social/economic?) rights are distributed? How do other countries view Swedish work for gender equality and what strength do they perceive having themselves compared to Sweden?

TuS04: Sex and Health - a Gender Equality Issue

Chair: Bibbi Carlsson, Co-Chair: Anna Ulveson

Organiser: Landstingsförbundet

TuS04:1 Sex and Health – a Gender Equality Issue

Bibbi Carlsson

The Swedish Federation of County Councils Landtingsförundet

The Swedish Federation of County Councils will arrange a symposium about equal opportunities in health care – a major challenge for the carers in the future. At the symposium Gunilla Risberg, district GP and researcher at Umeå University, will talk about the gender perspective in care in terms of illnesses, attitude and treatment. She will also present completely new research in which trainee doctors were tested making diagnoses based on the results of the same patients when told that they were different sexes. Barbro Westerholm, a doctor active in the Swedish Association for Senior Citizens, will talk about the use of drugs by women and men, while Birgitta Hovelius, professor of general medicine at Lund University Hospital will talk about women's and men's health and equal opportunities, the course of women's lives and the gender paradox. Karin Karlsson, Social Democrat politician in Västmanland, will talk about health policy and the working environment from the point of view of the employee and the patient. Bibbi Carlsson, managing director of the Swedish Federation of County Councils, will chair the symposium

TuS04:2 Gender bias and gender perspective in medicine and health care.

Gunilla Risberg Umeå University Hospital

This presentation will focus and discuss the concept of "gender bias" and what implications and consequences gender bias might have in medicine. Examples of gender bias in clinical work, medical education and research will be presented.

It will also address and exemplify what applying a gender perspective in health care would imply and entail.

TuS04:2 Women's Subordination and Ill-Health. a Swedish Call for a Feminist Perspective

Birgitta Hovelius Lund University

Knowledge of women's health and morbidity remains incomplete. Its fragmentary nature can be explained by a variety of factors. Adopting a gender or feminist perspective in research on women's health and ill-health is suggested as a possible means of extending knowledge in this area. The health paradox is considered, various of the models proposed to explain gender differences in health and morbidity being discussed. The importance of such determinants of women's health as their life conditions, life circumstances and the courses of their lifes are stressed, factors that have often been neglected in traditional medical research. Examples of women's subordinate position in professional life and in health care contexts are cited. Feminist practice is also exemplified.

TuS05: Women, Work and Alcohol

Chair Harriet Gillberg

ALNA and KSAN

TuS05:1 Women's Organisations Committee on Alcohol and Drug Issues

Harriet Gillberg

Women's Organisations Committee on Alcohol and Drug Issues - WOCAD

Women's Organisations Committee on Alcohol and Drug Issues - WOCAD - is a network/umbrella organization for 30 Swedish women's organisations. WOCAD works with issues regarding alcohol, narcotics and pharmaceuticals from a woman's perspective. Alna is the workplace's own resource in alcohol- and drug issues. Alna Riks is an umbrella organization that supports and co-ordinates the regional Alna councils to reduce alcohol and other drug abuse problems at work. WOCAD and Alna Riks together arrange a session on the theme; Women, Work and Alcohol.

TuS05:2 Why is the work place important when discussing alcohol and drug prevention?

Charlotte Mårtensson Consultant, Alna Stockholm, Sweden

During this session theory and practice will be mixed in order to show ways to work with young men and women and make them reflect upon the work-place's importance when it comes to life-style and drinking-habits.

How does drinking-trends in Europe and Sweden influence the work place? What kind of reactions do you get when working with prevention at the work places?

TuS05:3 Women, intoxication and health

Kari Lossius the Bergen Clinic's Foundation, Norway

Session gives you a short presentation about women's use of drugs throughout history. Furthermore it will illustrate new trends and sex role patterns and how these effects women's drinking-habits. We will critizise so called sex-neutral thinking in order for you to understand that success in treatment, science and prevention requires knowledge about women's special conditions according to drinking-habits and drinking-problems.

TuP01: Work and Family Life Balance

TuP01:1 Work and Family Interference as a Mediator of the Relationship between Work Environment and Workers Health

Murako Saito¹, Inoue, T.¹ Yamazaki, K¹ Nishiguchil, H.² Hidaka, T² Seki, H.³ Waseda University 3-4-1, Tokio, 1)School of Science and Engineerinig, Waseda University, Japan 2)Kyusbu University of Nursing and Social Welfare Japan 3)Faculty of Distribution and Logistics Systems, Ryutsu Keizai University Japan

Introduction: Negative or positive interference of family with work or Work with family give effects on the relationship between work environmental factors and job-related affective well-being factors. Especially perceived health of women workers might be influenced by the situation interfered by family and work The focus was placed on the identification of interdependency among work environmental factors as antecedents, well-being factors as consequence, work and family interference as a mediator.

Objectives: 1) to identify environmental stress factors for the health care women workers engaging in a rehabilitation hospital 2) to identify the interference between family and work and the interdependency among three variables, it. work environmental, well-being as consequent, negative and positive interference between work and family, and finally to propose how to cope with each situation for enhancing good family and work interference

Methods: Samples surveyed are 111 women workers engaging in rehabilitation hospital Their age average and SD are 33.5 ± 7.9 . Dependent variables are extracted by FA in Job-related affective wellbeing scale (.JAWS, van Katwyk et al 2000) and in the questionnaires prepared for this survey referring burnout scales (Maslach,1976 and]Pines,1978). Negative and positive interference between family and work was conceptualized by referring the concept of negative and "positive spillover between work and family (Grzywacaz et al, 2000). Four types of work and family interference, such as two types of negative interference, i.e. WF conflicts and two types of positive interference, i.e. WF enhancement were prepared.

Results And Discussion: Four different types of the final model which were selected among: sixteen combinations of the exogenous and endogenous variables with the mediators of work and family interference. The model in which job control as antecedent, job-related anxiousness as consequent with the mediator of negative interference of family with work(GFI=0.991, AGFI=0.973, PMR=0.038), the model in which fatigue as antecedent, job-related anxiousness as consequent with the mediator of negative interference of work with family(GFI!=0,970, AGFI=0.925, RMR=0.022), and two other models with the mediators of positive interference of work with family(CFI=0.988, AGFI=0.969, RMR==0.025) and family with work(GFI=0.993, AGFT=0.975, RMR=0.010) were finally selected as the most accountable and stable.

TuP01:2 Nr 120 Flexitime and the Work-Family Balance

Karen van Rijswijk¹⁾, Marrie H.J. Bekkerr¹⁾ & Christel G. Rutte ² Tilburg University, Tilburg, The Neatherlands

Flexitime is an instrument for employees to adjust their work schedules to their needs and rhythms. Usually, flexitime means that the day is divided into two parts, namely a fixed core time and certain flexible periods during the day. The present study investigated whether

Flexitime enhances the work-family balance. Participants were 319 investigated male and female administrative employees in two insurance companies in the Netherlands.

They were divided into respondent with high and low experienced flexibility in their working hours. Questionnaires wee administered measuring home-to-work interference, work-to-home interference, emotional exhaustion and cognitive functioning.

The results showed that, for, both men and men a high level of experienced flexitime was associated with less work-to-home interference, less emotional exhaustion and better cognitive functioning. For women a high level Of experienced flexitime was also associated with lower perceived home-to-work interference. Furthermore, we investigated whether the flexibility of the partner's working hours influenced the perceived work-family balance. As expected, we found that respondents (both men and women) who indicated that their partner has a high lever of flexibility, reported less home-to-work- and work-to-home interference, a lower level of emotional exhaustion and a higher level of cognitive functioning. However, when we looked at the combination of both respondents and partner's flexibility we saw that men as well as women are better off when both partners experience high flexibility, or when the partner bas a low level of flexibility and the respondent him/herself experiences a high level of flexibility. When both partners have low levels of flexibility or when the partner has a high, and the respondent a low level of flexibility, both men and women reported more complaints.

It is concluded that flexitime is a useful instrument in achieving a healthy work-family balance for both partners, and that one's own flexitime contributes more to positive outcomes than the partner. Theoretical and practical implications will be discussed.

TuP01:3 Women And Work - Being Mother And Nursing Professional

Thelma Spindola

Universidade Federal Do Rio de Janeiro - Escola De Enfermagem Anna Nery

Working in the area of women's health at a public institution in the city of Rio de Janeiro, Brazil led the authors to be in contact with working mothers. Motherhood is a important moment in woman's life but it has other connotations if she is both mother and a professional. The object of this study is the everyday life of the woman who has children and is a nursing professional. The objectives are: (1) to describe the everyday life of the woman who is also mother and a nursing professional; (2) to identify the influence (or interference) of the profession in the life of the woman who is also mother and a nursing professional; (3) to analyse her perception of the routine of being mother and professional, based on her history of life. It is a qualitative study, using the History of Life method (Bertaux 1980; Cipriani, Pozzi and Coradi1983; Brioshi and Trigo 1987;, GLat 1989). The scenario is a large public hospital in Rio de Janeiro. The subjects are mothers who are nursing professionals. The main question asked during the interviews was "Tell me about your life, about your routine as

woman, mother and nursing professional". The reports analysis shows the importance of the career to these women and that the salaried work quite often changes a person's life. They praise the type of work they have, although they realize that their profession interferes in their everyday lives, as women, wives and mothers. The peculiarities of nursing practice can be observed in their speeches as well as the interference of working in the family life. In conclusion, although women value the career, they are overburdened with the amount of tasks, pointing out the importance of the husbands' role in the family life.

TuP01:4 The Role Of The Cuban's Women At The Working Places

Caristina Robaina-Agoirre National Institute of Workers Health, Havana, Cuba

AIM: To analyse the role of the Cuban Women in the work environment was our main goal. Cuba is a country belonging to the developing Countries, so it has the similar economic problem that other countries in Africa, Latin America and the Caribbean region. Our social system after 1959 had made special emphasis in the health problem among our population, and the best integration and right for women. However still there are some gender problem that affect the women at the working place and expression in them health and wellbeing, in that way in this study we show some of them.

Method: In order to achieve the objectives we reviewed statistical analysis from 5 years ago of female that were hospitalized at the Julio Trigo Hospital for gynecologic problems and we selected a group of 100 whom were working at the moment of arrival to the hospital. We analysed some aspects (variables) as the actual pathologic, the professional background, the educational level, economic sector belonging, other pathologic in the last ten years, the number of children, marriage state, the living condition among other.

Main Results:

Cuba's women have a high level of health like all Cuba's population but in the working place they have some unsafe condition of work, chemical, physical and biological hazard that some time affect the health of females more than the men. There are many working places where they are exposed to high level of noise and this is a Stressor for reproductive health and central nerves system, if we have in count that the major part of our working women passed the reproductive age at the working places. The women have exposed also to the extra work exposition, as the care of the family (children, husband, mother and father) to make the homework and in the majority of the cases (the professional) they have to study during the night All of this risks we some time didn't have in consideration when we observed that the women workers have more number of spontaneous abortions than other of the same age and health condition. Other problem among the working women is the Arterial Hypertension mainly among the workers of health system (nurses and doctors), other health problems is the neurosis and the laryngitis among other diseases.

Conclusions: The role of the women in the society still imply high level of stress mainly in the developing countries where there are many hazard under control and where there are some social problem and behavior that make a high influence in the wellbeing of our women workers.

TuP02: Chemical Exposures and Health Effects

Tup02:1 Research on reproductive effects of chronic exposure to atrazine in epidemiological versus experimental studies

Eugenia Danulescu, Brigitte Scutaru, R. Danulescu, Stela Simirad, Felicia Gradinariu Public Health Institute, Iasi, Romania

Aim. Estimation of the atrazine exposure impact on the female reproduction function in epidemiological and experimental studies.

Method. 112 women occupationally exposed to atrazine in the synthesis industry of herbicideswere investigated compared to a matched control lot in a five years cohort study. Exposure evaluation comprised GC measurements of atrazine in workplaces air and HPLC assessment of atrazine urinary levels.

Complex fertility questionnaires concerning health status, reproductive history, time to pregnancy, spontaneous abortion, birth weight, congenital malformations, late foetal death and health status of children at time of birth were used. The fertility effects as well as the genotoxic, embriotoxic and teratogen potential of atrazine were also assessed in chronic experiments on Wistar rats by using two doses.

Results. Higher concentrations of atrazine in the workplaces air, six time greater than TLV, and also important levels of atrazine and its metabolite in blood and urine were found. The epidemiological research has shown a significant decrease of the fertility, a higher frequency of spontaneous abortions, and a significantly increased risk of congenital malformations and prematurity among those exposed. The cytogenetic investigations indicated a significant increase in the number of chromosomal aberrations. In the chronic experiment, atrazine determined significant decreases of the fertility and prolificity indicators. The slight number of alive foetuses per gestant female is correlated with the great number of precocious resorptions and reflects atrazin's embriotoxic effects.

Conclusion. The results of the epidemiological and experimental studies are convergent and indicate that high exposure to atrazine determines the decrease of fertility and the qualitative impairment of offspring. Accordingly, pesticides like atrazine could represent a major reproductive hazard for occupationally exposed women, where there is lack of control strategy for pesticide application.

Tup02:2 Monitoring Occupational Exposure of the Nurses Handling Antineoplastic Drugs

Didi Surcel, A.Mocan, V. Coldea, M. Beldean, L.Stoica, M. Botoc, Ligia Fat, Mihaela Negru Institute of Public Health, Cluj-Napoca, Romania)

Antineoplastic agents are widely used in the treatament of cancer and some non-neoplastic diseases. Cytostatic antineoplastic drugs are known as carcinogenic, mutagenic and teratogenic risk factors for health care workers who are occupationally exposed during handling of such drugs. Workers handling these drugs, such as nurses, involved in their preparation and administration, may face certain health risks.

The level of contamination by antineoplastic agents in the drug preparation and administration areas in a cancer treatment hospital in Romania was determined.

For the environmental monitoring and biological monitoring we have to perform measurements of the environmental exposure and of the uptake, respectively.

During preparation and administration of the drug, stationary air samples, personal air samples samples and wipe samples were taken and analyzed to detect cyclophosphamide (CP). Release of the CP was discovered in the preparation - site and in the 5 drug administration -sites.

Excretion of the CP in urine of the 45 nurses exposed to CP, who were involved in preparation and administration of CP during 10 - week period was also measured. Urine samples from exposed subjects were collected at the beginning and at the end of their work shifts in polypropyllene bottles. CP determination was carried out with gas chromatography / mass spectrometry (GC/MS)

The health effects of the long-term daily exposure to the antineoplastic agents were investigated by clinical examinations of the 45 nurses. Laboratory tests (blood tests for evaluation of hematopoiesis, hepatic and renal functions) and a standard questionnaire including workplace, job, duration of exposure, tobacco use, menstrual cycle dysfunctions and reproductive effects (spontaneous abortions and malformations in the offspring, etc.) were applied.

The air concentration of the CP detected in personal air samples ranged from $0.05 \, \text{g/mc}$ to $6.7 \, \text{g/mc}$.

The mean excretion of the CP in urine of the nurses exposed to CP, who were involved in the preparation and administration of the antineoplastic drugs was 0,37 g/day.

An increased risk of the menstrual cycle dysfunctions and spontaneous abortions were detected among the investigated nurses.

The results of this study pointed out the following:

Increased levels of the CP in the working environment and in the urine of the investigated nurses were found:

An excess of the reproductive effects among the investigated nurses was found.

Our study strongly suggest the presence of contamination with antineoplastic drugs in the working environment and the need to ensure the highest possible level of protection for antineoplastic drugs - exposed nurses.

Tup02:3 Risk Factors and Health State of Rural Teenager Girls in Ukraine

T.R. Lepeshkina, T.Yu. Martynovskaya Institute for Occupational Health, Kiev, Ukraine

Aim: To reveal the effect of risk factors (environmental factors and hygienic conditions of studies and life mode working) for health of rural teenager girls of the North region of Ukraine.

Methods: Environment monitoring, sociological questionnaires, physiological, hygienic, clinical and other methods of investigations.

Results: The investigation of the studying condition of the rural schoolgirls showed that classroom hygienic parameters: microclimate (temperature, humidity, air circulation speed), lightness, dust and bacterial pollution are in boards of hygienic normalites. High mental studying load, which leads to unfavourable influence on functional state of higher nervous activity and cardiovascular system was determined. Before the end of the lessons 77% of the girls complain of strong fatigue. High loading as a consequence of life mode working (personal plot, livestock poultry) was determined. Every day they spend on average 3 hours on this work. Among the

environmental factors the most considerable ones which influence health are pesticides, heavy metals, radionuclides (as a consequence of Chernobyl catastrophe).

The investigation of the health state of 300 rural schoolgirls has shown that the physical development in 26 % of cases is disharmonious. The overwhelming majority young girls have the low and middle level of physical health (54,7 % and 38,5 % respectively) and only 7 % of the investigated person's don't have morphofunctional deviations from the age standard.

The number of the persons having chronic somatic morbidity varies from 34,9 % to 49,2 % depending on the age. The most widespread chronic somatic diseases among teenagers are the diseases of the digestive, respiratory organs and of the blood circulation system.

Conclusion: The health state of the rural teenager girls of the North region are characterised by the high level of morphological and functional deviations, chronic morbidity and tiredness. Among the risk factors of rural girls-teenager's health there are: high studies and life mode loads, environmental factors.

Tup02:4 The Working Environment and Mental State of Female Workers in Shoe Factory

Wenyan Huang, Zhiming Liu, Songqing Liu Anti-Epidemic and Health Station, Zhuhai, Guangdong, China

Aim. There were many shoe factories in S.E.Z of Zhuhai. It's necessary to investigate the working environment of shoe factory so as to improve the working environment. and Studied the mental state of female workers working in these factories in order to formulate a scientific policy to manage them and raise the working efficiency.

Methods. Investigated and monitored the working environment of shoe factory, and determined the air concentration of occupational hazards in the working environment by GC. Subjects were 257 female workers working in these shoe factory, aged 18-30-mean 21.37-years ,working length 0.5-7-mean 1.54-years, and the culture level was middle school and above. The control group was workers who didn't exposed to occupational hazards , and the age ,working length and culture level were similar to the subjects.

All subjects finished the Symptom Check List-90 (SCL-90) after interviewed by the doctors and specialists in a quiet room.

The data were counted by using FOXPRO and SPSS statistical package.

Results. There were mixtures of benzene, toluene, n-hexane and butanone in the working environment of shoe factory, the average air concentrations of benzene, toluene was exceeded the national health standard. The nine' scores of female shoe factory workers were significant higher than the scores of control group and the Chinese female norms -n=664-p<0.05-. Their scores of anxiety ,depression, somatization, obsessive-compulsive, interpersonal sensitivity, hostilty, phobic anxiety, paranoid ideation, psychotism were all increased -p<0.05-. The multiple regression analysis showed that benzene ,n-hexane and toulene were the main factors which affected the nine scores of SCL-90 of female workers.

Conclusions. The average air concentrations of benzene, toluene in the shoe factory was exceeded the national health standard. And the results suggested that the workers' mental state had some problem, the occupational hazards in the working environment of shoe factory may have made negative effects on the psychological state of them. It suggested that the working environment should be developed and mental health consulting is necessary to make them healthy both in body and mind.

Tup02:5 The health status of the female workers in a metallurgical factory

Eniko Viragh, Unitarian Centralized Medical Office, Cluj; Claudia Munteanu, Inspectorate of Preventive Medicine, Sibiu; Al.Balin, Medical Office of the factory, Copsa-Mica and Victoria Coldea, Institute of Public Health, Cluj, Romania

Aims: This study was designed to assess the health status of female workers in non-ferrous metallurgy. Non-ferrous metallurgy is one of the most polluting industrial branches today. The workers are exposed to a cumulative noxious effect of Pb, Cd, Zn, but predominantly to high levels of Pb.

Methods: The Pb, Cd and Zn levels in the air of the workplaces were monitored during a 5-year period. 108 exposed female workers from this metallurgical factory were compared with 108 non-exposed females regarding their health status. Clinical and laboratory examinations were done and a computerized epidemiological questionnaire was conducted, to find out the health status of these females. The collected data were estimated and evaluated statistically.

Results: The Pb, Cd and Zn levels in the air of the workplaces were constantly high (Pb= 1.3-28.7 mg/m3; Cd= 0.2-1.7 mg/m3; Zn= 3.2-45.6 mg/m3). The Biomarkers of Exposure were: blood-Pb ranging between 28.9-79.5?g/dl; blood-Cd ranging between 1.3-2.7?g/dl; urinary-Pb between 178.4-211.3?g/l; urinary-Cd between 9.3-14.2?g/l and urinary-Zn between 0.9-1.46mg/l/day. The Biomarkers of Biological Effects were urinary-DALA between 21.8-26.7mg/l; medium degree of anaemia, proteinuria between 85.3-128.5mg/day. Total lipids, serum cholesterol and trygliceride levels were significantly (p<0.05) increased in the exposed females compared with the non-exposed ones. Significant differences (p<0.05) were observed between exposed females and controls regarding neurovegetative, digestive, pseudo-rheumatic, cardiovascular and anaemic symptoms. The blood pressure was also significantly elevated in the exposed females (p<0.05), as well as the rate of spontaneous abortion (p<0.01). The differences remained significant after adjustment for age, body mass index, smoking habits, alcohol and coffee consumption.

Conclusions: The long-term occupational exposure to heavy metals affects intensively the health status of the exposed female workers. Quantitative determinations of Pb, Cd and Zn in humans (blood, urine) might be an indicator for the estimation of a current or a former occupational exposure to these metals.

Tup02:6 Are there sex differences in uptake, metabolism, and excretion of solvents in humans?

Lena Ernstgård^{1,2}, Agneta Löf¹, Bengt Sjögren¹, and Gunnar Johanson^{1,2}

(1)Toxicology and Risk Assessment, National Institute for Working Life, Solna, Sweden.

(2)Department of Medical Sciences/Occupational and Environmental Medicine, Uppsala University, Sweden

Background and aim. Chemical exposure is common in industry, and constitutes a health hazard to hundreds of millions workers throughout the world. A large portion of these workers are women. However, assessment of health effects of chemicals have almost exclusively been based on studies in men. This may lead to misjudgement of the health risks for women. The aim of this study was to evaluate possible sex differences in uptake, distribution, metabolism and elimination of two typical organic solvents. The chosen solvents are both widely used but differ with respect to lipohilicity and biotransformation pathways.

Methods. Seventeen healthy volunteers (9 women and 8 men) were exposed to 2-propanol (150 ppm), m-xylene (50 ppm), and clean air (control exposure) on three different occasions. Each eposure was performed for 2 h during light physical exercise (50 W). m-Xylene, 2-propanol, and its major metabolite acetone (also endogenously formed) were monitored in exhaled air, blood, saliva, and urine by headspace gas chromatography. Methylhippuric acid, a major metabolite of m-xylene, was analysed in urine by high performance liquid chromatography. Body fat and lean body mass (LBM) were estimated from bioelectrical impedance, body weight, and height. Toxicokinetic analyses were performed using a two-compartment model and NONMEM software. Comparisons between sexes were made with the Student's t-test (significance level 0.05).

Results. The respiratory uptake was higher in males with no correction for lean body mass (2-propanol), but higher in females (*m*-xylene and 2-propanol) with correction. The volume of distribution was larger in males (*m*-xylene and 2-propanol) but larger in females (2-propanol) when expressed per kg LBM. The metabolic clearance of 2-propanol was higher in females when correcting for metabolic capacity (LBM^{0.75}). No other significant differences were seen.

Conclusion. Our study indicates small sex differences in the toxicokinetics of solvents in humans. However, the differences are consistent with sex differences in body build

TUP03: Reproductive Health

TuP03:1 Pregnancy – Based Sex Discrimination Labor Practices in Mexico

Mireya Scarone Telephone workers union, Sonora Mexico

In Mexico women participation in the workforce have increased in the last 45 years, from 11% in 1950 to 38% in 1995 a majority of them are between 20 and 39 years old that means the age of highest fertility. However, pregnancy has become a factor that limits their job security and more than that, their possibilities to obtain a job.

Mexican labor laws are protective to equality and reproduction, including regulations for non discrimination regarding race, age or sex; maternity paid leave and nursing breaks among others. Despite these legal warranties, there is not compliance of those regulations and there are some illegal practices that have become common today. One of them is the dismissal of pregnant women from their jobs because they are pregnant another is the physical examination reacquired to obtain a job in order to assure the applicant is not pregnant.

In 1998 Human Rights Watch conducted a study in Mexico–USA border area, they found that the export industries located there used the illegal practices mentioned above. This study was the base for a complain filled under the labor rights side agreement of the North America Free Trade Agreement (NAFTA), submitted to the US Department of Labor because pregnancy-based sex discrimination.

Women organisations have organised a national campaign in 1998, demonstrations and a petition to the senators for enforcing the current regulations that protect women's rights at work as well as to change those regulations are not clear or specific enough in order to improve their effectiveness.

We know there is not only a government responsibility to assure the compliance of the law regarding women worker's rights, but employers and workers unions, And there have been several efforts inside the unions conducted by activists that have not achieve the inclusion of this issue in the unions political agenda.

This paper presents the main points of a whole proposal for building a network for the promotion and defence of women's reproductive rights in Mexico. The development of a specific agenda for unions' action regarding women's rights will be one of the priorities of this network. Other activities of high importance will be to conduct a campaign to raise public awareness and to influence legislators to address this issue in the labor an health policies as well as to work with labor institutions for improving the enforcement of the law and regulations related women's labor rights and the human rights commission in order to include the labor rights as part of the fundamental human rights, because the have been usually denied.

Tup03:2 Risk Assessment of reproductive Hazards and Safety in Chemical Industry

O.V.Sivochalova, M.A. Fesenko, E.I.Denisov RAMS Institute of Occupational Health, Moscow, Russia

Concept of workers' reproductive health protection is outlined and principles of this problem of occupational and environmental health have been formulated (gender approach, additional protection of vulnerable groups, obligatory account for ecological impact etc). These lead to two groups of criteria: general medical and biological based on statistical indices and specialized ones for occupational risk assessment by such outcomes as pregnancy disorders, mortality of parturient women and neonates, spontaneous abortions, rate of child-birth with congenital developmental defects etc.

Starting from these criteria the scale for occupational risk assessment was elaborated depending on the degree of hazards at workplace in accordance to hygienic criteria of Guidelines R2.2.755-99 (1999) approved by Russian Health Ministry. The scale is based principally on numeric values of occupational morbidity index and is illustrated by values of relative risk (RR) and etiological fraction (EF) of reproductive health disorders of female workers of petro-chemical industry. Occupational health and safety professionals while conducting the workplace certification intend the scale for use.

The following documents on workers' reproductive health protection are in force: Sanitary norms and rules on female workers health protection SanPiN 2.2.0.555-96 approved by Russian Health Ministry and List of hazardous jobs and adverse labor conditions forbidden for female workers approved by Russian Government in 2000. These approaches and documents form the national policy for occupational risk assessment and risk management of reproductive disorders.

Tup03:3 008 Reproductive Health Of Rural Population Women In Ukraine

Yuri Kundiev

Institute for Occupational Health of AMN of Ukraine

Aim: To reveal effect of chemical, physical and biological factors of working conditions and environment, which are in real situation of Ukraine, on reproductive system of women in the rural area

Methods: Monitoring of environmental and working conditions, epidemiological monitoring of health, clinical physiological and hygienic, social and psychological and other studies.

Results: Reproductive health of rural women for last 20 years deteriorated. Rate of

Disturbances of menstrual function, pregnancy interruptions, gynecological illnesses in women before 30 years old substantionally increased. Spontaneous aborts are prevailed in the structure of pregnancy interruptions.

It was determined, that impairments of reproductive health more often were revealed in women employed in plant-growing in comparison with women occupied in cattle-breeding and office work.

Highest prevalence of gynecoligical pathology also was revealed in women plant growers. There was trustworthy correlation between development of disturbances female system and state of environment, living conditions, social and psychological factors. It must be paying attention to dependence of physical development and state of health Changes presence of pathology in rural young girls from unfavorite environment. Revealed regularities are confirmed potentiation character of combined effect of

Harmful factors of environment and working and living conditions on women reproductive system state.

Conclusion: Risk groups of rural population female cohorts were revealed. Dependence of reproductive health from harmful factors was determined and prophylactic measures were proposed.

Tup03:4 Occupational exposure and reproductive health effects

Simone Oliveira, Jussara Brito, Tatiana Fonseca Oswaldo Cruz Foundation

We assume that the working environment is healthy, with the capacity also to create health. Nevertheless, the industrialization process has been characterized by the increase of physical, chemical and biological agents at the work place, which could damage health and future generations. In this sense, it is very important that work conditions and its organization are adapted to the workers and not the contrary.

These damages to health get special meaning when related to sexuality and reproductive health. The occupational exposure could create a large spectrum of effects in the reproduction process. Before the conception these effects are reduction of the fertility, fetal abnormalities, limitation of the libido, menstrual dysfunction. After the conception these effects are spontaneous abortion, low birth weight, congenital malformation, prematurity, infantile cancer.

Some professional categories are more affected than others, with a higher concentration of women who are considered as occupational ghettos. In this sense we chose to study a group of workers in a laboratory researching pharmaceuticals, in Rio de Janeiro, Brazil. This study gives priority to a qualitative approach, having as a goal the knowing of the relation between work, health, sexuality and reproduction. It shall establish a close approximation between scientific knowledge and the experiences of the groups of workers involved.

Data collecting have been made in the form of interviews, questionnaires, meetings and visits to the work places. Environmental problems, work organization and reproductive sexual health have been discussed in workshops. A seminar has been organized with the aim of amplifying the debate about the importance of the work environment being more gender balanced. We try to focus the worker health in a bigger circle including questions of sexuality and reproductive health. Specific questions of the work in the laboratory should be discussed and coordinated with the workers health program in the institution.

These meetings have shown how unaware the laboratory female workers are about their chemical exposure and its reproductive effects and how big the misinformation is about the risk level.

Problems related to subcontracting, work precariousness and its consequences have also been shown. Currently we are working on the analysis of questionnaires in order to elaborate diagnostics of work conditions and health. Meetings with small groups of workers shall take place with the aim of validating the information collected and their analysis. This diagnostic contains a booklet, which should help us to prevent and control the health risks (and the reproductive health). We shall be able to identify a group of female workers interested in continuing the discussion using this booklet.

Tup03:5 The Cuban working woman's position toward the reproductive health

Ysrael García Casanova and Josvany René Sánchez Curbelo National Institute od Endocrinology. La Habana. Cuba

The Cuban working woman carries out a main roll in the different spheres of the economy and the society. It was made a comparative and prospective study in order to know the Cuban working woman roll in the reproductive health and compare it with those do not work. The sample was formed by 280 women among 25 and 45 years old, with stable couple, 50% of working women and the same percent of not working women. The 77% of the women had children, not being significant difference in this aspect between the working women (WW) and the not working women (NWW); the 97,9% of the WW have used contraceptive measures versus an 89,3% on the NWW, the 91,3% of the WW decided using a contraceptive while there is only a 68,5% of the NWW; the 65% of the WW decide by thyself the practice of abortion while there is a 55% in NWW, the 98,3% of the WW face the negativism of the couple when practicing abortion while there is a 92,1% of the NWW, the 63,6% of the WW ply a main roll when planning a child, the NWW depend in a 55% on the decision of the couple; the 51,4% of the WW are more talkative that men when talking about sex while there is only a 36,4% of the NWW, the 91,4% of the WW demand from they couple protection againd sexually transmitted sicknesses(STS) and there was and 81,4% in the NWW; the 90% of the WW are sure that the both members of the couple are responsible of the protection against the STS while the NWW prefer to protect themselves in 40%. Concluding we may affirm that the WW condition do not stablish a difference with the NWW in our country in order to have children but it was found that the WW play a more active roll in the reproductive health compared to the NWW.

Tup03:6 Sexual Health In Women

Gloria Suciu, Colentina Hospital, Bucuresti, Romania

Objective: To aim of the study was to determine the incidence of some sexually transmitted infections (syphilis, vaginal candidacies, trichomonas vaginal infections) in three different groups of women and to evidentiate some factors that may influence the sexual health of women

Material and Methods: The study comprised 226 women aged 18-40, belonging to three different groups:

A: 150 Women working in a big factory with predominantly female employees

B: 55 working in an institution with approximately equal male-female employees (alternatively healthy women)

C: 21 who presented for consultation in our department for signs in the genital area (lesions, vaginal discharge)

Results:

In group A, there were 2 cases of syphilis, 2 cases of syphilis and vaginal candidacies, 25 cases of vaginal candidacies, 2 cases of trichomonas

vaginal infections. Three of the four cases of syphilis were contacted from the same male source. In group B, there were 1 case of latent syphilis, 5 cases of vaginal candidacies. In group C, there were 5 cases of syphilis, 4 cases of trichomonas vaginal infection , 3 of vaginal candidacies, 7 of syphilis and vaginal candidacies, in 7 cases of the genital lesions were not Stls. We found a lack of knowledge about STI and their prevention in about 65 of women.

Discussions:

Group A pointed out a possible greater risk of spreading a STI from a single male source. In work places with predominantly female employees women may be exposed to sexual harassment The study showed a high incidence of vaginal candidacies in all groups.

The presence of STI among ultimately healthy women and in women presenting with diseases outside the genital area is a reason of great concern. They are a source for spreading Stls. It is to be noticed the association between two STI in some females, presenting for sign in the genital area. This fact may point a lack of education and a disorganized sexual life. Sexual education, methods for preventing STI should be accessible to all categories of women

TuW06: Gendered Labour Market Processes

TuW06:1 Positive Selection to Employment – a Gendered Analysis of the recent Swedish Labour Market

Mehmed Novol, Anne Hammarström, Urban Janlert University Hospital, Umeå

During the 1990s Sweden has undergone a dramatic change of the labour market which has been characterised by high and long standing unemployment rates as well as gendered changes in the organisation of labour market and working conditions. New forms of employment, such as part-time work, fixed-term contracts, telework and self-employment, have emerged at the labour market. The work environment has also deteriorated. These changes of new work forms and deteriorated work environment have mostly occurred in women dominated occupations.

However, permanent employment is still considered as a norm and it is requested because of the social security it offers. It has been suggested that those who gain a permanent employment under these circumstances tend to be positively health-selected. The objective of this study was to analyse, from a gender perspective, if there is positive health-selection on the Swedish labour market.

A cohort consisting of 1083 school leavers in 1981 from the municipality of Luleå, an industrial town in northern Sweden, was prospectively followed during 14 years with surveys at four different times. The total non-response rate after 14 years was 3.5%. In this study we used data from surveys in 1981 (when participants were 16 years old), 1986 (21 y.) and 1995 (30 y). Year 1981 and 1986 were periods of low unemployment and high economic activity and growth while 1995 was characterised by high unemployment and decreased economic activity. The participants were divided, according to their labour market status at age of 21 and 30 respectively, in four groups:

- 1. *stable labour market status* those who had a permanent job both in 1986 and 1995 survey;
- 2. *improved labour market status* those who gained a permanent job between 1986-95:
- 3. *impaired labour market status* those who loose a permanent job between 1986-95; and
- 4. *precarious labour market status* i.e. those who never had a permanent job. To test health related selection we used alcohol consumption, which was estimated as the average yearly consumption in decilitres of pure alcohol. The data about labour market status as well as alcohol consumption were taken from the questionnaire, which was repeated at each survey.

Compared with men, fewer women had stable (30% vs. 42%) and improved (29% vs. 32%, not significant) labour market status. More women than men had impaired (16% vs. 12%) as well as precarious (25% vs. 14%) labour market status. The average yearly alcohol consumption among men increased between the ages of 16 (11 dl of pure alcohol) and 21 (68 dl) and then decreased at the age of 30 (42 dl). Among women the levels of alcohol consumption were rather stable during the observed period (approximately 10 dl) with

exception for women who constantly had a permanent job during the observed period, who reported an increased alcohol consumption in 1995. The length of unemployment and improved socio-economic position among men and motherhood among women were also associated with decreased alcohol consumption. Men who became fathers did not change their alcohol consumption. At age 30, men easier than women gained a permanent job. Besides, no previous long-term unemployment, no history of previous alcohol abuse as well as with whitecollar occupation were of importance for gaining a job. The results can seem paradoxical as we know that unemployment rates in this period were higher among men than women. An explanation offered can be that the male dominated occupations are protected by the prevailing gender order on the labour market. This order creates domination of men on the labour market as well as in society as a whole by an asymmetric division of work, both paid and domestic, influence and resources between men and women. The concepts of the man as a breadwinner and of the male dominated occupations as more lucrative are still existing despite the fact that the women's paid work constitutes an important part of the contemporary labour market. In conclusion we found both health-positive and gender-positive selection to employment on the current Swedish labour market. Men were favoured in gaining new jobs even during the recession while women who were in work increased their alcohol consumption.

TuW06:2 Women and the Information Technology Labour Market in Ireland and Sweden

Chris Mathieu Lund University, Lund

In this paper/presentation we will present preliminary findings from an ongoing study on women in the IT labour markets in Ireland and Sweden.

Our focus is primarily on variables impacting women access to employment in technical occupations in this branch, and their career advancement opportunities. We focus on three specific "moments":

- 1. entry into employment (both into the branch and one's current firm):
- 2. intra-organizational mobility; and
- 3. exit and re-entry. As opposed to viewing these "moments" in merely structural terms as static outcomes, we investigate each as "interactive situations" where diffuse and specific cultural conceptions related to gender and such things as merit, capabilities, reliability, flexibility and aesthetic, interpersonal and social skills, etc, may arise and be deployed and contested.

Our interactionist approach draws inspiration from the works of Cecilia Ridgeway, Barbara Reskin and Charles Tilly, among others. Our research combines quantitative and qualitative methods, the former utilizing national employment and educational statistics, complemented by our own statistics from our sample of firms, the latter comprising of interviews with management officials and employees of both sexes in 10 IT firms in Sweden and Ireland.

One of the themes that the paper will take up is what we term the "women as a productive asset" dilemma. Our research has shown that a great many firms are interested in hiring more female employees for technical jobs, citing reasons on economic productivity and efficiency.

These reasons are based in the belief that women possess qualities and characteristics different from men – they see technology and solutions differently: women are more "down to earth" when it

comes to designing systems and solutions, keeping costs down leading to more user-friendly products: women have more refined aesthetic sensibilities; and women have social skills that facilitate work groups to function more fluidly and reduce extravagant internal competition. The dilemma lies in that these beliefs on the one hand lead several companies to introduce policies to increase their share of female employees (i.e. paying higher bonuses to employees for the recruitment of women than for the recruitment of men, sending women to recruitment fairs, offering more generous pay and bonus to women etc). While on the other hand these beliefs are in all likeliness both merely essentialist myth and also possess negative characteristics associated with women that are unspoken, as well as positive characteristics associated with men that may well set limits for how many women are ultimately desirable to obtain the "right balance" in divisions or project groups.

A second limitation on increasing the number of women working in this branch, in light of the low percentages of women going through formal university training in relevant fields, is the reluctance of (at least Swedish) firms to train their employees beyond keeping those who are already in technical positions up-to-date with current advancements in their field. In other words, many firms want to and actively attempt to hire ore females in technical position, but they want or expect these prospective employees to come trough the regular established channels. This reluctance to train for career transitions within companies negates the possibility to "upgrade" in-house staff that may have knowledge and skills that lie close to the level required for employment on the "technology side" of the company which could lead to a direct increase in the number of women in those jobs. Likewise, there is a reluctance to invest in "upgrading" the skills and increasing the experience of the (relatively large proportion of) women, who come out of career-transition training programmes who do not, in the eyes of potential employers in the industry, have an adequate level of skill and experience to be directly employed. Ultimately; at best, efforts are made at maximizing one's share of the women already in circulation in the industry, rather than increasing their numbers.

TuW06:4 Taylor revisited: Gender Segregation and Division of Labour in the ICT-Sector

Else Nygaard) Copenhagen University

Background: During the late 90es, in Denmark the action plan by the social partners to reduce monotonous and repetitive work (MRW) hardly showed any effect upon working conditions for female labour in industrial production sectors (Nygaard 2000; Hasle et al. 1998, 2001). Our evaluation programme was extended to comprise also the office and administrative sector including the sector of information and communication technology (ICT) (Wissing et al. 2001).

Aim of study: The aim of the present study was to apply a gender perspective (gender segregation and division of labour) upon the ICT companies included in the evaluation.

Material and methods:From a total of 22 companies, 8 were classified as ICT-services companies, 4 IT-consultancy companies, 1 IT-data, and 3 call centres. Interviews and observations were performed on site. Leading questions: Type and duration of MRW (including intensive computer work). Persons exposed? Departments and functions? Efforts to reduce MRW?

Results and discussion: Gender segregation was pronounced: IT-consultancy was absolute male, and tele-communication was absolute female. In IT-consultancy the major part of jobs was contact to customers (problem solving, installation, coaching) and thus less time behind computers (programming). Project orientated team-work was main characteristic of work organisation. In call centers the employees are locked to work stations through head sets and computers tied up in

advanced technological systems, resulting in a constant time pressure, and continuous control of the individual performance. Head of department in one of the call-centers put it this way "The truth about a call-center is that the profit margin is very small per call. The location of our next call center will be in a town with a large group of women in their 30es and 40es looking for a job. They are the best phoners." Thus there is a constant motivation for the introduction of new technologies which will intensify time pressure and control of the individual. In these trends we see a clear parallel to industrial production characterized by division and specialisation of labour - Taylor revisited.

Conclusion: 30 years of computer sciences was a male phenomenon, which has now imposed itself upon modern work life. Effectively to a degree that in year 2001 gender segregation and division of labour by technical, intellectual and social qualifications within certain parts of the ICT-services sector is as pronounced as was described by Taylor (1911) in the industrial productions, then in terms of muscular and manual qualifications.

References

Hasle P. et al. Mid-way evaluation of the Danish Action Programme against Repetitive Work. CASA-report (In Danish): 1-142. Copenhagen 1998.

Hasle P. et al. Evaluation of The National Action Programme Against Repetitive Work. CASA report (In Danish): 1-190. Copenhagen 2001.

Nygaard E.Health (2000).Behaviour Pattern of Enterprises: Monotonous and Repetitive Work from Gender Perspective. Journal of Behavioral Medicine: Vol 7. Suppl 1:96.

Wissing P. et al. (2001) Repetitive Work within Office and Administrative Sector (In Danish). CASA-report: 1-173. Copenhagen.

Taylor FW. (1911) The Principles of Scientific Management. Harper & Row. New York.

TuW06:5 Burnout, Stress or Something else? Segregating the Swedish Work-Force

Antoinette Hetzler Lund University, Sweden

During the last ten years international epidemiological studies of mental illness have refocused interest on the causes and consequences of psychiatric illness. Research based on interviews with 8100 individuals within the United States has shown that the number of individuals faced with a psychological disturbance during their live is estimated to be as high as 50%. Moreover only about 20% seek or receive help for their situation. Even though psychiatric illness is both more prevalent than previously has been thought in the population, much illness is not diagnosed. Nevertheless women report more psychiatric illness than men.

Disability pensions in Sweden because of a psychiatric illness were stable during the 1980s in Sweden, and decreased during a period of high employment at the end of the 1980s (14.6%) only to begin and to continue increasing throughout the 1990s. Disability pensions because of psychiatric illnesses currently account for about 23% of all disability pensions. The number of psychiatric illnesses, in Sweden, has also increased among individuals who are on long-termed sick leaves. Women are over-represented in this category.

A hypothesis recently advanced, as a possible explanation for the increase in Sweden of women reporting and being diagnosed with psychiatric illnesses is that the psychosocial work environment in areas of traditional women employment has deteriorated.

In this presentation, I will discuss the possibility that society has neither understanding of nor tolerance or methods for treating women between 40-55 with certain psychiatric symptoms. From a longitudinal study of 800 long-term sick cases terminated during the 1990s, the hypothesis was

tested that it is more difficult for women to maintain their position in the work force when she is middle-aged and when she has a psychiatric diagnose.

The presentation continues by focusing on the increase in the number of "vague" diagnosis and the early retirement of middle-aged women out of the Swedish work force. I conclude the presentation by presenting an outline of a theory of segregation and marginalization of older women from work.

TuW06:6 Gender inequalities in the Nigerian Labour Market

Christiana E.E. Okojie University of Benin, Benin City, Nigeria

Gender inequalities persist in all spheres of life in Nigeria. The concept of gender refers to the social and historical constructions of masculine and feminine roles, behaviours, attributes and ideologies. Gender has an important influence on occupational distribution of employment in the Nigerian labour market. Statistics on employment in Nigeria show that the national female labour force participation rate is 45.1 per cent, there are wide variations between states. However, although a large number of women are working, they predominate in low—status occupations, primarily in agriculture and sales occupations, where productivity and incomes are low and the incidence of poverty is high. There are relatively few women in professional -administrative positions where incomes are higher and the incidence of poverty lower. Thus women predominate in the informal sectors of the rural and urban labour markets in Nigeria.

In the formal sector, women are to be found mainly in the Federal and state civil services, and the teaching and health services. However they are more likely to be found in lower level occupations, very few women have reached higher level and decision-making positions in these services. Although more women are now gaining employment in the private sector, they are yet to break through the "glass ceiling" to reach management positions. Similarly, there are few women in the higher income and male- dominated professions such as Accountancy, Medicine, Engineering and Architecture. The proportion of women faculty in Nigerian universities is also very low. Hours of work are longer and working conditions poorer in the informal sector.

A major factor responsible for women's low participation in the formal sector and in higher-paying decision-making positions in the labour market is their more limited access to formal education especially tertiary education. A minimum of a tertiary-level educational qualification is usually required for these jobs. The gender gap in education is highest at the tertiary level. Other factors are gender inequalities in access to capital or credit for informal sector participants as well as lack of appropriate technology by women. Gender stereotyping of occupations and the strains of combining domestic responsibilities with demanding occupations are also responsible for girls opting for "female" occupations in Nigeria.

This paper presents data on trends in occupational distribution of employment in the Nigerian labour market using secondary data and data from studies conducted by the author. It will also discuss working conditions as well as factors responsible for the gender inequalities in the Nigerian labour market with emphasis on gender imbalances in education in Nigeria. Implications for labour market and educational policies in Nigeria will be raised. It will be divided into sections as follows:

- I Introduction
- II Gender and Occupational Distribution of Employment
- III Gender, Skill Requirements and Working Conditions in the Labour Market
- IV Gender Imbalances in Education and the Nigerian Labour Market
- V Policy Implications and Conclusions

TuW07: Disposition of Work in Time and Place

TuW07:1 Using Coordinated Compressed Workweeks To Meet The Child/Elderly Care Challenge

Rudy Hung Chinese University of Hong Kong

The married-female workforce today is huge and many of them are raising young children. When their male spouses are also full-time workers, the usual way to take care of the children is to use baby sitters and day-care centers. These child-care services can be very expensive and may even be unavailable. Their quality is often less than reassuring the their service hours don't always correspond well with parents schedules, upsetting parent users.

This child-care problem of the working spouses translates to problems for their employers. Many employers have installed programs to address the child care issues. Some have on-site or off-site day-care centers charging subsidize rates. Some subsidize employees child-care expenses. Some offer flexible schedules like flextime, job sharing and work at home Some offer just child-care information and referral services.

The population of elderly is growing rapidly and elderly care is an increasingly important issue. Sandwich employees, those employees who must care for both young and elderly

Dependents, are increasingly common. Many employers have begun providing program similar to their child care programs to assist employees with elderly dependents.

While these child/elderly care programs are by and large effective, they are not entirely ideal. For example, on-site day-care centers are costly to start and to run and they expose employers to liability. Here we look at how coordinated compressed workweeks (CWs) of the spouse can help meet the child/elderly care challenge. What we will show is that certain combinations of two CWs allow at least one spouse to stay home on each day of the week to look after young or old dependents. If employers are able to provide scheduling flexibility and scheduling education, this is a minimal-cost approach to the child/elderly care issue.

TuW07:2 Working Hours and Health.

Malin Josephson, , Eva Vingård The Karolinska Institute, Stockholm

Introduction

In Sweden, women are employed outside the home to about the same extent as men. Women often have the main responsibility for home and family and as a consequence around a third of the women have a paid working week less than 35 hours. An additional explanation of the high frequency of part-time employment among women is that work in the public sector, where most of the women are employed, imply part-time work.

This study is part of "Work and health in the Public Sector", a prospective longitudinal project with the overriding aim is to identify factors that will increase the future health and work capacity for employees in the public sector in Sweden. The aim of this study was to describe the association between health and working hours.

Method

In this study, a questionnaire concerning work hours, workload and health was answered by 815 female home care workers employed in six different communities (84% participation).

Result

The major part, 64%, had part-time work. Of the women with part-time work, 21% reported that they wanted to increase their working hours per week. It was more common among women younger than 45 years to desire full-time work compared to elderly employed. Good health (measured by SF36) had a significant association with a desire of fulltime work. Besides single mothers, many part-time employed women with children were interested in full-time work.

There was no difference in health between full-time and part-time employed. However, a desire to work fewer hours per week was associated with health problems. Health problems were most frequent among those with full-time work who reported no influence on the working hours.

In one of the involved communities a working hour project was started. The home care workers had possibilities to construct their own time-schedule together with their workmates in the same district. Naturally, the employed were satisfied with their working-hours and their general health showed a tendency to be better than the other workers in the municipality. However, they reported more heavy patient transfers and more musculoskeletal problems than the homecare workers with a traditional time-schedule. They also reported less social support among the coo-workers compared to their colleagues not involved in the project.

Conclusion

This preliminary result indicate that many of the employed desire to change the working hours. In the ongoing process with more full-time work and more influence by the employed on the working hours is it important to concern the workload. In this longitudinal study it will be possible to follow the changing process and to study the association between working hours and a sustainable health.

TuW07:3 Changes in the field of working time in France and the effect for women

Jennifer Bué; Dominique Roux-Rossi DARES, Ministère de l'emploi et de la solidarité; CNAM – GRIOT

This paper is based on qualitative surveys conducted in companies and related to night work for women and the treatment of part time employees in the context of the reduction of work hours in France.¹

The paper will present the trends in working time for women, more precisely concerning night work, part time work and collective reduction in working time, analysed in terms of the suppression of discrimination and the improvement of gender equality in employment. With this object, it is necessary to take into account the fact that gender discrimination in the labour market cannot be analysed without assessing the women's situation in the family and social aspects.

On the matter of night work, there existed, in France, a prohibition for women to work during the night that a recent law has superseeded. We will analyse the effect of the suppression of this

¹ Jennifer Bué, Dominique Roux-Rossi, Night work for women, La Documentation Française, Paris, 1993. Jennifer Bué, Jean Luc Metzger, Dominique Roux-Rossi, Part time work on trial of collective reduction in work time, Rapport DARES-CNAM-GRIOT, Paris 2001.

prohibition on the women discriminations in employment. The question is to highlight whether a "protective" law for women was in contradiction with an "equalitarian" law and to understand whether the suppression of direct gender discrimination could not generate new discrimination in employment.

During the last twenty years part time work has greatly increased, under the spur of public incitement. It became a form of employment aimed at women and unqualified jobs: in France 82 % of part time workers are women and, for a large share, it is not a voluntary choice.

We have analysed the application of the reducing working hours laws in order to estimate whether they will allow a better integration of the part time employees and are a factor of professional equality, or, on the contrary, if they continue reinforcing inequality in employment concerning wages earning, autonomy, flexibility.

The recent trends in the field of working time in France are far from the propencity of unification of treatment. On the contrary, they converge on heterogeneity of status and of employees' treatment in factories; this fact may, according to different contexts, reinforce inequalities, or, on the contrary, limit some of them.

TuW07:5 A Gender Puzzle? Men Work Relatively less Hours than Women after a Long-Term Sickness

Daniela Andrén Göteborg University

Using the human and health capital approaches, this study analyses the effect of past absenteeism due to sickness on actual earning of women and men. The human capital approach was built on the analysis of costs and returns to investments in human capital through the computation of earning differentials. In the last 30 years, a huge empirical literature confirms that schooling, training and experience have a positive effect on earning profiles, but as people approach the end of working life, profiles typically turn downwards. For example, a decline in annual earnings close to retirement age can be explained by either a decrease in hours worked, or y less overtime with a wage bonus, or by a combination of these. The results of this study shows that this ""trend" is significantly explained by an average poor health of people when their approach the end of working life. These results are consistent with our theoretical model that assumes health as a durable capital stock that yields an output of healthy time.

Individuals inherit an initial amount of this stock that depreciates with age and can be increased by investment. People decision to work is governed by their work capacity (which in our model is expressed in terms of both health and human capital) and their reservation wage. If there are short-term or long-term effects o past poor health on actual labour supply, we expect that they would take one of the following forms:

- 1) Unchanged hourly wages and fewer hours worked;
- 2) Decreased hourly wages;
- 3) Decreased hourly wages and fewer hours of work (per year).

This is why, in examining the effect on health on earnings, one should analyse both annual earnings and hourly wages. By studying hourly wages and annual earnings, we can discern whether en effect on earnings is derivable from an effect on hourly wages, or if not, attributable to changes in hours worked. People with poor previous health history may simply have to face wage discrimination. The multivariate analysis did not reveal significant effects through the diagnosis when men and women were aggregated, but did reveal that men with musculoskeletal problems had

on average a higher wage and men with general symptom diagnoses had a lower wage, whereas there was a negative effect on earnings for women for mental diagnoses and injuries. The results also indicate that being a "a foreigner" had the most significant negative effect on the wage rate of women, while the same parameter was not found significant for men. This study shows that the past absenteeism due to sickness has not a significant effect on hourly wages, but it had a significant effect on annual earnings, This means that both men and women were not "penalised" (by lower hourly wages) for their previous sickness, but they earn less per year, which means that they work less. The later result is more evident for men, who usually work full time, and it seems that would choose to work less after a sickness period. The result is less "visible" for women, who work in general less hours than men, and in many cases return to part-time work that he they had it before the sickness period. An implication for the policy is that the work alternative should always be more attractive than the alternative of disability for people who can still work Therefore, it is desirable to have program s directed to improve the social and physical work environment, and individual performance (through training and/or vocational rehabilitation on those individuals).

TuW08: Gender Ergonomics; Neck-Shoulder

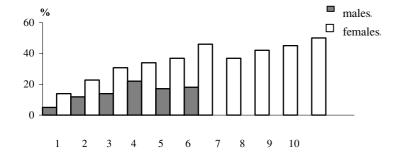
TuW08:1 Prevalence of Neck and Shoulder Disorders in Men and Women, in various Occupations

Catarina Nordander, Istvan Balogh, Kerstina Ohlsson, Gert-Åke Hansson, Staffan Skerfving Department of Occupational and Environmental Medicine, University Hospital, Lund, Sweden

Background: Though the physical work environment has improved in many aspects during the last century, work-related musculoskeletal complaints still occur in a high frequency in certain occupational branches. In 1998, such diagnoses constituted more than 50% of the reported occupational disorders in Sweden. There is a large gender difference in the risk of developing pain; a majority of the affected workers are females. The reason for this difference is unclear and debated. Aim: To explore the occurrence of musculoskeletal disorders in different occupational branches, for men and women.

Methods: Three hundred and eighty male and 1158 female subjects in different occupations, were examined with a standardised physical examination. Based on predefined criteria, clinical diagnoses for the neck-shoulder region were set.

Results: The prevalence of neck-shoulder diagnoses was 16% among the men, and 36% among the women. However while around 50% of the female assembly workers were affected, the prevalence for women performing varied industrial work was only 14%, which is in the same magnitude as examined male workers. The ratio between female and male prevalence within the same occupation varied between 1.5 and 2.8.



- 1. Varied industrial work (22M/40F)
- 2. Office work (128M/198F)
- 3. Injection moulding (14M/21F)
- 4. Fish processing work (116M/206F)
- 5. Floor manufacturing (16M/152F)
- 6. Laminate manufacturing (84M/87F)
- 7. Dentistry (90F)
- 8. Cleaning (251F)
- 9. Plastics trimming (31F)
- 10. Assembly work (82F)

Figure 1. Prevalence of neck/shoulder disorders for males and females in different occupations.

Discussion: The study shows that there is a large difference in the prevalence of musculoskeletal disorders between workers in different occupations. This can be due to differences in physical or psychological exposures, or a combination of these. Even more interesting, there is a great gender difference within the same occupation. Plausible explanations to this phenomenon are differences in biological vulnerable and or differences concerning the aforementioned exposures. For the office workers, a systematic evaluation of work load showed, that due to different work assignments, the female workers are restricted to constrained work-postures to a much larger extent. The fish processing workers, though sharing the same work-title, have a heavily gender segregated work. The females perform work tasks with high repetitivity and sight demands, the males do a lot of heavy lifting, but less short cycled work.

Conclusion: The question of whether females are more vulnerable as concerns work-related musculoskeletal disorders than males cannot be answered until large groups of workers from both genders performing exactly the same work tasks, not only sharing the same job title, are examined.

TuW08:2 Manual handling activities among female nurses in a Japanese hospital: Risk factors, health effects and potential improvements

1, P.C. Lundberg Uppsala University Sweden T. Ohkubo Nihon University, Japan

Lift and transfer of patients have been perceived by nursing personnel as the most common causes of back problems. Several studies have identified a connection between patient handling and low-back pain (Hagberg et al., 1996; Smedley et al., 1995). Little is known about how Japanese nurses perceive risks in manual patient handling. Therefore, the aims of this study were to determine the most stressful tasks as perceived by nurses from different wards of a Japanese hospital, to identify risk factors and musculoskeletal discomforts related to manual patient handling, and to assess potential improvements of manual patient handling tasks.

A random sample of 298 female nurses from a hospital in Tokyo answered a questionnaire for manual patient handling. The questionnaire was divided into four sections, namely, (1) work experience and training, (2) perceptions of stressfulness of different tasks in nursing care (Owen et al., 1992), (3) evaluation of risk factors and musculoskeletal discomfort in different parts of the body (Borg, 1990), and (4) assessment of potential improvements of manual patient handling.

The results showed that transferring a patient alone without lifting aids was the most stressful task (3.92 \pm 2.73; 1 = very low, 5 = very high), patient's weight was the top risk factor (1.97 \pm 0.20; 1 = low, 2 = high), and the worst musculoskeletal discomfort was in the lower back (4.79 \pm 1.81; 1 = very low, 7 = very high). The younger nurses rated more highly interaction with colleagues as a risk factor than did the elder nurses (p = 0.01), while the latter rated more highly shift work as a risk factor than did the former (p = 0.05). The less experienced nurses rated lack of training lifting aids more highly as a risk factor than did the more experienced nurses (p = 0.02). The elder nurses had more discomfort in buttock than the younger nurses (p = 0.01), while the latter had more discomfort in upper arms than the former (p = 0.04). The Japanese nurses mentioned that the most important improvement perceived concerned better workspace around the patients' beds through workplace redesign, discussion of lift and transfer techniques with colleagues, individual awareness and adequate staff. Accidents and musculoskeletal pain could be prevented by using nurses' experiences and providing appropriate education in manual patient handling.

From the results, it is clear that when the Japanese nurses work with manual patient handling they face high risk of back pain, especially those who are younger and less experienced. In conclusion, suitable education of manual patient handling in nursing educational programmes, adequate staffing, and risk prevention programmes should be provided. Environmental considerations and workplace redesign should facilitate the work of patient handling. For example, the number of beds in the wards could be reduced in order to provide space, and two toilets of insufficient size could be transformed into one with adequate space. Furthermore, it is generally possible to move and rearrange furniture so that nurses can work more freely. Another suggestion is that the design of equipment currently used should be critically examined in order to find out if alternative designs would reduce the risks of working in restricted spaces. In addition, nurses with

experience in manual patient handling should participate in the work of relevant committees when refurbishment or a new building is planned.

Key words: Manual patient handling, female nurses, Japanese hospital, risk factors, health effects, improvement

Acknowledgement

The authors are grateful to the Japan Society for the Promotion of Science (JSPS) and the Royal Swedish Academy of Sciences (KVA) for the provision of a grant, which made this study possible.

References

Borg, G. (1990) *Psychophysical scaling with applications in physical work and perception of exertion*. Scand J Work Environ Health, 16(suppl), 55-58.

Hagberg, M., Ekenvall, L., Engkvist, I-L., Kjellberg, K., Menchel, E., Person, G., Hjelm, W.E., and PROSA-gruppen. (1996) *Ryggolycksfall i sjukvård*. Arbete och Hälsa, 6, 1-69.

Owen, B.D., Garg, A., and Jensen, R.C. (1992) Four methods for identification of most back-stressing tasks performed by nursing assistants in nursing homes. *International Journal of Industrial Ergonomics*, 9, 213-220.

Smedley, J., Egger, P., Cooper, C., and Coggon, D. (1995) Manual handling activities and risk of low back pain in nurses. *Occupational and Environmental Medicine*, 52, 160-163.

TuW08:3 The burden of health of female tea pickers of Kenya

Andrew Oduor Muruka

Directorate of Occupational Health and Safety Services, Kericho, Kenya

Tea picking is a labour intensive activity and provides a fertile ground for heavy physical work. The present study explored the burden of health on female tea pickers with special emphasis on spontaneous abortions and back pains. Data was obtained (using a structured questionnaire) on occupational history, duration of service as tea picker, age, weight, district of birth of respondents, marital status, height, live births and number or children among other parameters for 133 female tea pickers selected randomly in various tea estates within Kericho Tea zone covering Bureti (31), Nandi (37) and Kericho (65).

Results indicate that tea-picking activities is responsible for 33% of back pain among female-workers. Height determines the degree of bending and is critical in inducing abortions reported only In 3 out of 596 children born alive.

The health burden of tea pickers to female employees seem to be closely related to their height, duration of service and their age in case of back pain while the their height and that of the tea picking table are critical in case of spontaneous abortions. Tall female tea pickers

(H>168.55 cm) continuously exposed daily for long working hours to short (low) level tea beds may increase the risk of spontaneous abortions.

The study recommends national policy interventions, which should include the reproductive health concerns of female tea pickers. At the local level, managers should organise work such that the daily working hours of expectant tea pickers are consistent with their physiological abilities. However, further confirmatory investigations are necessary.

TuW08:4 Nr 088 Musculuskeletal Injury amongst Sonographers in UK

Eleanor Ransom

The Society of Radiographers, London UK

The extent of musculoskeletal complaints of the hand, arm, neck, shoulder and back in sonographers throughout the United Kingdom and work-related and personal variables were studied. A very large proportion (89 percent) of all UK sonographers are women.

The research is in two parts. To find out the extent of the problem a questionnaire survey was distributed to 400 individual sonographers, including heads of ultrasound departments rather than from a questionnaire survey in the UK.

Interviews were conducted with over 55 sonographers who were current or recent sufferers of musculoskeletal disorders (MSDs) in order to determine what the chief causes were.

It was found that a high proportion of sonographers were currently experiencing, or had experienced in the past, one or more work-related symptoms.

The two major contributory factors, which were found to be present in the vast majority of cases of MSDs, were firstly, the intensity of work, with sonographers having little control over their work pace and little opportunity to take rest breaks; and secondly. The lack of suitable risk assessments, required by UK legislation, into ergonomic design or equipment and general health and safety of the work place.

TuW08:5 Working Condition And Its Influences On VDT Female Workers' Health

Nguyen ngoc Nga

National Institute of Occupational & Environmental Health (NIOE) IB Yerstin, Hanoi, Vietnam

05 employees in banks, post offices, printing houses were chosen for study aiming at investigating their working condition and their complaints due to the working conditions.

The results showed that:

The working conditions were not good: narrow working places, lighting and work-station design were not ergonomic, long working time with VDT, not good ventilation...

After working day more than 80% subjects complained to working environment and their health. The most common complaints were stuffy "bad" air, fatigue, headache, dizziness, blurred vision,, eyesight reduction, eye stinging.

The rate of some symptoms and complaints related significantly to the working time with VDT.

76-90% subjects complained of musculoskeletal disorders. The rate of complaints and the pain parts depend on the tasks and working time.

The Visio test results showed that: after working day 64% employees suffer from eyesight reduction, 80% suffer from increasing the time for seeing stereo picture.

Some recommendation were suggested in order improving working condition.

Nguyen ngoc Nga. Duong Khanh Van, Ta thi Tuyet inh, Vu Bich Hoat, Pham ngoc Quy et al. NIOEH - Vietnam

TuW08:6 Musculoskeletal Disorders in the Neck/Shoulders, Health and Working Conditions among Women in Southern Sweden: A 9-Year follow-up of a Case-Control Study

A. Nordlund, K. Ekberg Linköping University, Linköping

Data from a 9-year follow-up of a case-control study on musculoskeletal disorders and physical, organizational and psychosocial aspects of the work environment are presented. The extent of self-reported musculoskeletal symptoms in the neck and/or shoulders in 1989 and 1997, working conditions in 1989 and 1997 and self-reported health (SF-36) in 1997 are compared between men and women.

Cases (n=80 answering both the 1989 and 1997 surveys) were identified as those persons who consulted a physician in community in Southern Sweden for new musculoskeletal disorders in the neck and shoulders in 1988-1989. Controls (n=457) were drawn as a random sample of the working population in the community were the cases appeared. Since there were only 19 male cases, comparisons between men and women were largely confined to the control group.

Cases reported more musculoskeletal symptoms in the neck and shoulders than did controls, both in 1989 and 1997, although the percentage reporting such symptoms increased in the control group, but not in the case group. Health (SF-36) was poorer in the case group in 1997. Working conditions improved in the case group, while it worsened in the control group. Separate analysis of female cases indicated that female cases might be worse off than their male counterparts in terms of self-reported symptoms and health.

The prevalence of self-reported musculoskeletal symptoms in the neck and or shoulders was statistically significantly higher among female controls than among male controls in both 1989 (56% and 41%, respectively) and 1997 (65% and 51%). Female controls also reported more musculoskeletal symptoms in other parts of the body than did male controls, regardless of whether they had reported symptoms in the neck and/or shoulders in 1989 or not. Also, self-reported health (SF-36) in 1997 was poorer among women than men among controls reporting symptoms in the neck and/or shoulders in 1989. Preliminary analyses of working conditions indicate gender specific differences with males tending to have poorer physical (ergonomic) conditions and women tending to have poorer organizational and psychosocial conditions. The differences were however somewhat inconsistent and analyses aiming to shed light over the male/female differences in the relationships between working conditions and self-reported symptoms in the neck and/or shoulders are ongoing.

TuW09: Occupational Health and Safety, Different Occupations

TuW09: 1 Myocardial Infarction Risk Among Different Occupational Categories in the Female Population of Kaunas, Lithuania

Vilija Malinauskiene, Regina Grazuleviciene Institute of Cardiolgoy, Kaunas, Lithuania

In western European countries differences in the risk of myocardial infarction among occupational categories have been already revealed. The risk of a first myocardial infarction among female occupational categories in Lithuania has not yet been established. The objective of the present study was to estimate the risk of a first myocardial infarction among women in different occupational categories.

The population-based case-control study was conducted among 25-64 years old women, residing in Kaunas city. Cases group contained 191 patients with a first episode of myocardial infarction in 1997-2000. Controls were 482 women without clinical diagnosis of ischemic heart disease. Information on occupation was obtained through a personal interview using standardized questionnaires for both groups. International Standard Classification of Occupations (International Labour Office, (ISCO-88).-Geneva.-1991) was used to classify various occupations into 9 occupational categories. A statistical software EPI-info 6.0 was used for data analysis.

Among occupational categories the odds ratio for managers (I-st group) was 2.64; 95% Cl 1.17-6.02 as compared with technicians and associate professionals (3-rd group). The odds ratio for professionals (2-nd group) was 0.64; 95% Cl 0.30-1.35, while for clerks (4-th group) was 0.82; 95% Cl 0.34-1.97. Service workers and shop and market sales workers (5th group) had a 2-fold increased risk (OR=2.18, 95% Cl 1.03-4.63) as compared with technicians and associate professionals (3-rd group). The odds ratio for craft and related trades workers (7-th group) was 1. I 1; 95% Cl 0. 57-2.19, for plant and machine operators (8-th group) was 0.98; 95% Cl 0.29-3.18 and for elementary occupations (9-th group) was 2.06, 95% 0.79-5.37.

In conclusion, women in occupational categories of managers (I-st group) and service workers and shop and market sales workers (5-th group) had an increased risk for the developing of a first myocardial infarction.

TuW09: 2 From Work to Occupational Health: Working Conditions' Analysis in the Textile and Clothing Sector - the Particularity of Women's Work.

Carla Barros Duarte, Sara Ramos, Marianne Lacomblez Universidade Fernando Pessca Porto Portugal

The study hereby presented is based on both theoretical and empirical thesis developed in the Work Psychology domain, Ergonomics and Occupational Health (Derriennic, Touranchet, Volkoff, 1996; Lacombiez, 1991; Lacomblez, 1996; Lacomblez, Santos, Vasconcelos, *in press;* Marquié, Paùmes, Volkoff, 1998; Messing, 1999;). It's a development of a comparative study, where the aim is to

analyse in which way and extent the working conditions detain influence, favourable or not, to Occupational Health - considering gender and subject's age differences.

The choice of the textile and clothing sectors for the making of this study is sustained in the fact 'that this domain presents itself as a privileged area of interest for the analysis of women's health in work. It is a domain where the majority of workers are women and where the problems related to segregation in work, professional mobility and risks remain with little awareness in the studies of the relation between health and work.

Taking into consideration precedent studies in this domain (Bardot, Berneron, Bertin, Lasfargues, Derriennic, 1996; Brito, 1999; Molinier, 1995; Vézina, Tierney, Messing, 1992), the present study includes the analysis of the interaction of different determinants of professional activity (namely the characteristics of working conditions, subject general characteristics, outside work life style characteristics) with the general health condition characteristics.

This study focuses on the data analysis brought by the elaboration and individual application of a questionnaire about health, age and work (SIT), based on the ESTEV (1990) and VISAT (1996) inquiries, to a sample of 350 workers of the textile and clothing industry, with different ages and gender. The study was complemented with both individual and collective interviews, with the intention of refining the understanding the particularity of women's work in the analysis and perception of professional risks and in the strategies adopted in life both within and outside the job.

Thus, the results of this investigation study allowed us to: (i) identify and stress the importance of professional risks to one's health, product of the combination of different working constraints, (ii) identify the mediating factors between health and work (intersubject and intergrupal variability); (iii) assess in which way the professional activity conditions have an impact and are perceived by workers of different ages and gender, in the interaction with health; (iiii) assess in which way the characteristics of life outside the job affect and are perceived by workers of different ages and gender, in the interaction with health.

TuW09: 3 Women construction workers – a study of occupational hazards and preventive measures

Krishna Nirmalaya Sen Larsen Toubro Limited – ECC division

Aim: To assess the impacts of hazards posed to female workers engaged in construction sites and to develop suitable intervention strategies to prevent the accident and injury.

Methods: Various construction work-related activities, which are commonly undertaken by the female workers at the construction sites, were identified. Hazards associated with these activities with reference to various injury and accident cases were analyzed. Case Studies were used for analysis and dissemination of information on proximate and contributory causes of accidents for prevention in future.

Results: Injuries at workplaces are preventable. Safety induction and informal on-the-job training found helpful to improve safety awareness and prevention of accidents.

Conclusions: Injuries at workplaces are preventable. Selection proper intervention strategies are important to make the attempt successful.

TuW09: 4 Aspects of gender relations in Greek industry

Paraskevi (Evi) Batra National University of Athens, Greece

Problem under Study

In Greece there is a legal framework outlining the minimum acceptant level of Occupational Safety and Health (OSH) conditions in all the work places. In the formation of these conditions, the role of Worker's Occupational Safety and Health Committees, the Occupational Safety and Medical Officers and the top management of the enterprises is very important. The problem under study is the exercising of how the female workers and employees understand these roles and what their views are on exercising these roles in the everyday working reality.

Objectives

The objectives of our study were first to identify if the Greek industries comply to the law not typically, but substantially and second to assess the level of workers' awareness of OS&H issues, as well as their involvement in forming of a safe and healthy workplace.

Methods

The methodology was based on a structured questionnaire, delivered by the researchers in association with trade union representatives in the workplaces. Here, we present the analysis of the female workers' opinion on the role and function of the Unions, Worker's Occupational Safety and Health Committees, the scientists and the top management, as experienced daily in their factory. Conducting the whole investigation from a gender point of view was not a priority that's why the questionnaire had not been structured for specific gender analysis. The sex of the responder is the only "gender" element of the questionnaire.

Results

This paper discusses the findings of a survey concluded in 25 industries, members of the Greek Federation of Industrial Unions (OBES) during 1998. The study was undertaken by the Greek Institute of Occupational Health & Safety in Athens, with the financial support of the European Union's Directorate of Employment program SAFE. The survey was pioneering in its aims providing quite valuable material on aspects of working conditions in Greek industrial places.

The women's opinions, comparing to those of men's, appears as follows:

They do not answer to the questions in great extent.

They give answers out of the pre-fixed list in quite many cases.

They criticize very austerely all the persons having OSH duties and obligations.

They are not satisfied by the OSH recommendations given to them.

They do not take the initiative to approach all the other persons except the doctor. They are waiting for them to arrange a meeting.

They are almost absolutely negative about the role of the high management regarding OSH topics.

Conclusion

Studies looking at gender relations in Greek industry with a particular emphasis on unions, using evidence-based approach are scarce. This study attempts to fill this gap, and in particular to investigate women's working relations with the "male" dominated Unions, the Worker's Occupational Safety and Health Committees, the Occupational Safety and Medical Officers and the top management of the enterprises where they work. The study concludes that greater female participation in such committees should be encouraged in order to safeguard their involvement on Occupational Safety and Health issues. Questionnaires that are not constructed for gender analysis cannot bring in depth information about gender aspects.

Limits

Gender relations have been an interesting aspect of the whole study and some key points were registered. Despite the fact that the number of women participating in the study was rather low, the study managed to bring forward some valuable material on working conditions for women.

Contribution of the Project to the Field

It is the first time that such an investigation has been conducted among Greek workers. The study constitutes a solid ground for registering Greek industries OS&H views from a gender point of view.

TuW10: Facilitators and Barriers to Employment for Vulnerable Groups

TuW10:1 The Ability for Persons with Fibromyalgia to Remain in a Work Role

Gunilla Liedberg University Hospital, Linköping

Om Fibromyalgia (FM) is a musculoskeletal condition with a prevalence of 2-3%, six times more common in women than in men, and characterised by a generalised, chronic pain with allodynia/hyperalgesia. Common symptoms besides pain are muscle stiffness, tiredness, sleep disturbances, memory and concentration difficulties. Symptoms influence the performance of daily activities and the ability to maintain life roles. Work disability is high, and those still in work, usually work part time. Compared to other rheumatic diseases, FM has the highest costs for society when the direct costs for health care, sickness benefits and sickness pensions are included. The aim with these three studies were to investigate, with different methods, how women with FM experience problems in relation to work and to develop new strategies and interventions to facilitate for women with Fm to remain in a work role.

A questionnaire study included 175 women with FM, was followed up with qualitative interviews with 40 women. The results show that about 50% of the women are working. 35% part time. Over 30% of the working group also had part-time-sickness benefits or pension. Women with longer education worked to a higher extent. Of the working group, 80% estimated that they could go on working, the rest claimed that changes were necessary, fewer work hours, less demanding tasks, or stop working. The qualitative study showed both societal and individual factors are important for remaining in a work role. The meaning of work was expressed in terms of "to have an identity", "to feel valuable", to have routines and a structured daily life" and opportunity for "social contacts". Another study performed with Oregon Health Sciences University, USA will be completed during 2002. Forty-nine women

From USA, and 49 from Sweden, aged 18-39 years, are included. Data are collected at the beginning of the study, after 6 and 12 month through interviews, self-assessment instruments, medical investigation, exercise test and test of muscle endurance.

At the time of diagnosis, 61% were working outside the home. When the women were interviewed, within 6 month of the diagnosis, only 46% were currently working (57% of Americans and 35% of Swedes) Women with chronic musculoskeletal pain have a reduced work capacity and when the labour market cannot meet the demands in form of flexibility, shorter and flexible work hours and social support in the work situation the women are denied their right to work. The life situation of these women is complex and their 24-hour day must be seen as a whole, where balance between work, leisure and domestic work must be accomplished. Personality, total life situation, other commitments, type of work tasks, possibility to influence work situation, and the physical and psychosocial work environment are all important factors for the possibility to remain in a work role.

TuW10:2 Enchancing Interaction in Society among Disabled People by Information Technology

Auli Lepistö, Kaija Saranto, Johanna Intakanen, Tuuia Kivinen University of Kuopio

Internet based learning environments are widely used in education at different levels. However, persons who have learning disabilities have special needs for the environment. As well as all students, also students with different kinds of disabilities need education and tutoring how to use these environments. in addition, an Internet- based learning environment may have added value to disabled people. Is it possible to enable these students to be full-acting members of information society by using internet based learning environment?

Purpose of this Study: This sub-study is a part of a larger evaluation project at the University of Kuopio. The main aim of this study is to evaluate the effects and effectiveness of web-based learning environment in education of disabled persons. The focus is on the following questions: Does the internet-based learning environment strengthen the possibilities to socialism with other people? Can it be used as a communication tool with other students, teachers and employers? Does it facilitate the participation of the disabled in information society?

Materials and Methods: This study uses the ex ante -. ex post study design. The data will be collected during September and November 2001. The students will be interviewed in one boarding school for disabled students. At the first phase, the students' computer literacy and the possibilities to use computers in education are assessed. The students' needs and present customs to use computer will be described. Also the motivation and willingness to use computers is of special interest.

Results: Preliminary results will be presenter at the conference.

TuW10:3 Intervention elucidate Intra organisational Hindrances to Employee Development

Josefin Barajas Linköping University

Introduction: Samhall is a company owned by the Swedish government. It employs 29.000 persons, most of them with work disabilities. The purpose is to offer the employees rehabilitation and meaningful developing work within the organisation The goal is to promote employees to get another employment at the regular labour market, so called transition. During the last years attention has been drawn towards the fact that less women than A men get such an employment.

A problem based intervention, directed towards women employed at Samhall and their work managers, was carried through. The women (76 participants and a control group of 62) and their works managers (32 participants, no control group) worked in separated groups of 6-8 participants with a tutor once a week for four month. The aim of the intervention was for the women to promote self confidence, sense of control, initiatives and, in the long run, to find another employment at the regular labour market. For the works managers the aim was to develop strategies to support initiatives among women employed at Samhall to approach the regular labour market. Another aim was to develop new strategies in their motivational work, and to approach organisational problems. Both process evaluation and assessment of effects are carried through.

Method: Semistructured interviews were made with all participants (women and works managers) and the control group before and after the intervention. An 18-month follow up is presently performed.

Results: Before intervention bad health, low education, and an unwillingness to accomplish a higher education due to lack of self-confidence were reported as hindrances for transitions to the regular labour market among the women. They also experienced a more secure work situation within Samhall than they thought they would have in other companies. After the intervention, women participants in the intervention group, compared to the control group, reported an improved self-esteem, improved ability to cope with new situations and to take initiatives. They also reported increased interest to seek another employment, and were more likely to think that they would not remain at Samhall in two years. Further , the participants had got more education or were more positive to education.

The works managers generally reported lack of support from superiors in the organisation. Several reported lack of encouragement for initiatives of their own, and insufficiency in time and resources for the motivational work. Samhall should, in addition to their rehabilitation task, also, give some profits in terms of high productivity. A conflict between these responsibilities was reported and the two organisational goals were experienced as inconsistent. For the works managers the intervention was reported to provide an arena, legitimated by the organisation. The arena the works managers possibilities to actively work with their own role and work situation, and in some cases direct actions to improve the motivational work were developed and taken. The intervention also provided opportunities to focus on the organisational inconsistencies and find solutions to organisational hindrances.

The result of the 18-month follow up, in addition to results in terms of sick leaves and transitions before, during and after intervention will be reported.

Conclusions: The intervention method provided an opportunity for the women to formulate and specify their own hindrances and resources, and to improve self esteem and sense of control. Essential ingredients for mobilisation of empowerment characterised the intervention method. The intervention provided opportunities for the work managers to see and handle organisational inconsistencies, to focus on their role in the work situation and to facilitate the motivational work.

TuW10:4 Maternity and Job Insecurity

Maria De Koninck and Romaine Malenfant) Université Laval, Quebec Canada

This paper presents the results of a qualitative research carried out in an attempt to enrich our understanding of the way in which pregnancy-related conditions influence the career paths of women. It was intended as a follow-up to an earlier survey of pregnant women, many of whom expressed apprehension regarding loss of their former employment conditions or position, occasioned by maternity leave, We interviewed women in the sales (10), service (10) and industrial sectors (10), six months after their return to work following a first maternity leave. Ten employers from the same fields were also interviewed. The results support our initial hypothesis, according to which the impact of maternity on women's career opportunities become instantly apparent with the pregnancy announcement. Although young mothers receive a sympathetic ear from their entourage

when expressing conciliation problems, little assistance is offered in terms of other options that would allow job retention. Thus, the career paths of the women interviewed were affected and, in some cases, even interrupted. Indeed, it appears that these new mothers were compelled to pursue a career, first and foremost, through their own individual resources and conciliation abilities. In their view, family policies represent essential tools for protecting income and continued employment links throughout the pre- and post childbirth period, However, from a long-term perspective, such policies offer scant support and have little bearing on gender-based work division. In general, the employers we interviewed appeared receptive, but at the same time expressed resistance to any impediment of their administrative authority. Family policies should be complemented by labour policies inducing work environments to acknowledge the necessity of reviewing their work organisation and facilitating conducive conciliation conditions. This would require adapting labour standards and employment benefits to job diversification, as well as challenging certain fundamental aspects of the organisational culture.

TuW11: Agents and Activist for Change Examples from different Regions

TuW11:1 Low-Caste Rural Working Women in India

Indira Koithara Yuvaparivartan (Youth for Change) – An NGO

Yuvaparivartan (Youth for Change) is an Indian developmental NGO which works in nearly half the states in India. Two-thirds of its workers and volunteers are women, and over half its programmes are directly targeted at women. Within this broad target group of women, Yuvaparivartan has tried to develop a special focus on the most deprived group of women in India – low-caste rural working women.

In India, 24 percent of the population is made up of low caste and tribal people. These are today commonly called the Dalits or the oppressed. This group does not include what are called the backward castes that make up another 45 percent of the population. About 80 percent of Dalits live in rural areas and forest fringes. The women of this group suffer from the triple handicaps of caste, habitat and gender.

From the enactment of the Indian constitution in 1950, the Dalits have been given 22.5 percent reserved seats in state legislatures and the national parliament as well as in government jobs and government college places. This is one of the strongest state-sponsored affirmative action programmes anywhere in the world. Yet, the condition of the Dalits has barely improved during the 51 years the programme has been running. The only beneficiaries of the programme have been a thin upper layer of Dalits. The vast bulk of Dalits continue to live in segregated hamlets doing their traditional 3-D (dirty, difficult, dangerous) jobs.

For the past 15 years India has also had an affirmative action programme favouring women. A third of the seats in local government bodies have been reserved for women, with a separate quota within it for Dalit women. Local government in India has very little real power. Therefore, this reservation in favour of women has had little empowering impact. A move is currently afoot to reserve the same quota of seats for women at state national levels. If it comes through (and it probably will), it will make a big difference to higher caste women. But the new measure is unlikely to lead to any notable improvement in the lives of Dalit women, if the experience of seat-reservation for the Dalits as a whole during the past half-century is anything to go by.

The disadvantages that Dalits and women suffer in India have deep roots in the society. While legislation is certainly needed to improve their condition, there can be no real improvement unless it is accompanied by vigorous social activism. Yuvaparivartan's experience in this field has led it to draw the following conclusions which it is trying to incorporate into its new programmes:

- Dalit women have much more in common with Dalit men than with higher caste women. If their health and working conditions are to be improved, the dominant framework for activism must be that of deprivation and not gender.
- India's successful practice of democracy for 54 years has led to political mobilisation becoming a pre-requisite for progress to be achieved on any issue. At the same time, politics has become largely a vehicle for capturing power devoid of policy purpose. Social activists face a serious

- problem in generating a degree of political thrust for their work without getting drawn into the vortex of politics.
- The focus of the Indian media today is almost entirely on the urban middle class, which constitutes the vast bulk of its viewers and readers. It is extremely difficult to persuade them to take interest in marginalised groups such as low caste rural women. But given the huge importance of the media in the country today, this is a challenge that has to be taken up

TuW11:2 Lessons From The Self-Employed Women's Association; Providing Medical Insurance In Gujarat Since 1992

Michael Kent Ranson London School of Hygiene and Tropical Medicine UK)

Background: The Self-Employed Women's Association, based in Ahmedabad, Gujarat, has run an Integrated Social Security Scheme since 1992, targeted at women working in the informal sector. This scheme includes life, medical and assets insurance. Coverage under the scheme – until recently restricted to adult females working in the informal sector – is growing exponentially, having increased from 23.000 in 1999-2000 to 89.000in the current year. For a very low premium – approximately 32 rupees (US \$ 0.73) earmarked for medical insurance - the scheme provides reimbursement up to 1,200 rupees (US \$ 27) per hospitalisation.

Aims: To assess the impact of SEWA's medical insurance fund, in terms of: protection of women from hospitalisation costs, financial sustainability of the scheme, frequency of utilisation of the scheme, and quality of hospital care.

Methods: We have assessed the impact of the SEWA medical insurance scheme based on qualitative interviews, a household survey, a review of 1.930 insurance claims, and visits to hospital facilities (data collected 1999-2000).

Result: The scheme has covered a mean of 77% of the direct costs of hospitalisation among claimants (median 93%) over the last six years. The medical insurance scheme is almost entirely self-sustaining, receiving a small subsidy from the German Technical Corporation (GTZ) to help cover administrative costs. Needless to say, there remain with the SEW scheme numerous hurdles to overcome. Rates of claims submission among members remain very low at only 19 to 37% of rates of hospitalisation. This appears to be due to lack of awareness of scheme benefits among members, and the fact that it is time and resource consuming for members to submit an insurance claim. Quality of inpatient care varies from potentially dangerous to excellent. The problem of quality is difficult to address given that two-thirds of hospitalisations are at small, unregulated private-for-profit facilities spread over a wide geographic area.

Conclusions: Much can be learned from the SEWA experience, particularly around the design and management of community-based medical insurance scheme. For example, poor, illiterate women have the ability to understand, and the willingness and ability to buy health insurance; however, ongoing communication and education are required to facilitate utilisation of a health insurance scheme. A scheme offering access to multiple health care providers offers benefits with respect to consumer choice and geographic access but it may be very difficult to monitor and influence quality of care. Nesting an insurance scheme within a larger development organisation ensures that support is available to address other threats to financial stability (e.g. job loss, lack of working capital ,death) and facilitates the participation by the very poorest members of a

population. International organisations are currently promoting the community-based insurance as a means of improving equity and efficiency in health sectors. As such, it is important to learn from innovative, indigenous health insurance schemes like SEWA's.

TuW11:3 Gender Disparity within the Somali Society

Huda Ali Jama & Ali Abdi Mohamed FEDHA HARGEISA Female Headed Households Development Ass

Raising awareness:

Women may be vulnerable to violence in all its forms and especially when perpetrated by persons in positions of authority in both conflict and non-conflict situation. Therefore, effective public measures must be taken to address both the causes and the consequences of violence. While partly a source of the prelim raising of both individual and collective awareness in support of girl education remains indispensable and seems to be one of the few hopes that at the present can change the situation and enhance women status.

Gender Sensitisation Training:

The voices of the Somaliland women are never heard! Therefore, despite being a long process, the perpetual need for gender sensitisation and the community level remains indispensable. Government, UN & NGOs must organise gender sensitisation workshops. Key individuals with the ability to carefully approach sensitive issues must be identified & persons who are committed and possess powerful analytical skills.

Outrageous effects of gender discrimination must be fully addressed without apprehension. Thus any acts of gender based violence that results in, or is likely to result, physical or physiological harm or suffering to women, including threats of such acts, deprivation of liberty whether occurring in public and private life, in families and intimidation at work, violates and impairs the enjoyment by women of the human rights and fundamental freedoms must be brought to justice and punished properly.

Communities must be indoctrinated on the importance of the girl child educating, using mass media programmes and campaigns, including the use of posters and leaflets to be disseminated at all levels of responsibility. Parent should be told about the economic opportunities of educating their young girls today and the communities must be mobilised on these sensitive issues of gender.

The women also need to be educated in their religion to understand that Islam does not deny the rights of women but instead upgrades and gives lot of opportunities to women for education, employment, ownership of properties, and is completely against violence of all sorts.

If all those steps are taken, we are hopeful that a change can be seen in the live of Somali Women.

TuW11:5 Women Work and Health on an Island, off an Island: Women's Employment in Small State Economy

Carole Medcalf
Working Women's Centre of Tasmania, Australia)

Tasmania, as an island state of Australia, faces different issues for it's economic development than mainland Australian states. It has more in common with other small state economies, such as Scotland ore some of the Pacific Islands economies than the mainland states.

Our geographic location has an impact on our domestic and international markets and on areas of employment that are available to women. Tasmania's major industries have traditionally been agriculture, the public sector and fishing. The number of women in employment in Tasmania have decreased in the past few years and the agriculture and fishing industries have not employed large numbers of women anyway. Recent government reports say that employment for women is expected to remain part time or casual ad concentrated in the "traditional female" dominated service/hospitality industries.

Levels of job satisfaction, job security and career development then become major issues for women to contend with. In order to develop better employment prospects this small island state needs to be developing long-term employment in new industries. Some of that is happening in aquaculture, organic farming and scientific exploration (because of our proximity to the Antarctic) This paper will explore these issues with a view to sharing some of our experiences with other like economies and to receiving reciprocal information about their economic development.

TuW11:6 The Contribution Of Women In Overcoming The Economic Crisis In Cameroon Tambe, Dickson Ashu

Tambe, Dickson Ashu Elena Non Governmental Organisation, Mamfe, Cameroon

The presentation mainly oral, will be titled *The Contribution Of Women In Overcoming The Economic Crisis In Cameroon*, will comprise three sub themes. The presentation will begin with an introduction delimitating the period of the economic crisis in Cameroon 1980 to the present, the socio-economic characteristics of the period and its impact on the lives of Cameroonian Women.

The first sub theme will focus on the activities of women in the informal sector of the labour market that is the various gainful activities in the information sector in which women are engaged such as beauty making, catering, hawking foodstuff businesses... with respect to their status and ages. Attempt will also be made to advance reasons why most women engage in the informal sector.

The second theme which relates to women,, work and family-life balance will dwell on the different regional practices concerning women and work prevailing in the country, strategies adopted to make up for the gap created at home when the women work such as employing babysitters, engaging family relations to serve as such... and the manner of sharing the family burden and health effects. When the woman is working.

The third sub theme will focus on women as agents and activists for change. It will also highlight problems encountered by women and strategies adopted to effect change such as collective and individual efforts of women. Strategies also take national and regional character.

Information for discussion will be essentially primary through interviews with women and traditional elite's. Secondary information will also come from the news media of the Cameroon Radio and Televisions Corporation, local newspapers and from the authors' personal observations.

TuS06: Women entrepreneurs and regional development,1

Chair Inger Danilda, Co-Chair: Hanna Westberg

Organiser: National Institute for Working Life and Ministry of Industry, Employment and Communications

TuS06: 1 Does Women's Entrepreneurship imply Marginalisation or a Way out of Marginalisation?

Inger Danilda Sweden

In spite of the fact that women constitute more than a quarter of all entrepreneurs in Europe, women entrepreneurs are most often disregarded when entrepreneurship is discussed. Both research and practice show that woman entrepreneurs experience more obstacles than men in setting up their enterprises do. The services offered by enterprise agencies and training organisations are often developed with the male entrepreneur as a norm. In order for the society to further develop women's entrepreneurial potential, it is important to increase the knowledge of the conditions for women entrepreneurs, which obstacles they face and the factors that stimulates growth in women owned businesses.

TuS06: 2 Development-Oriented Training adapted to the Needs of Mico-Enterprises owned by Women by Joining Learning Intensive Networks

Inger Danilda Sweden

Development-oriented training adapted to the needs of Micro-enterprises owned by Women by joining learning intensive networks.

The overall objective is to develop training methods for interactive learning as well as work-linked training and learning in non-formal settings, promote inter-organisational development and establish knowledge intensive networks between Micro-enterprises, social partners and actors within the vocational training infrastructure. Methods for mainstreaming gender equality in training and support for managers and employees in Micro-enterprises will be highlighted. Training methods developed is taking into consideration both women's and men's interest.

TuS06: 3 Network, Growth and Women Entrepreneurs

Marianne Sökjer-Petersen Lunds universitet

The aim of the project is to increase knowledge and understanding of entrepreneurship on the part of women. As gender equality in society increases the need of gaining further insight into gender differences in the conducting of business increases as well. During the last ten years, increasing attention has been directed at entrepreneurship of various forms and at the ability of new businesses to contribute to continue business development and to replace in a satisfactory way earlier business form. Whereas research on small and middle- sized businesses conducted within the field of business administration has provided considerable knowledge in this area, there has been only limited psychological research either on entrepreneurship generally or on entrepreneurship by women.

The aim of the project is to study, from a social psychological perspective, both similarities and differences between entrepreneurship by women and by men, in particular as regards attitudes toward business growth, development of business strategies and utilization of business networks. Participants in the empirical investigation will be members of so-called "krAft" groups (krAftgrupper). These are knowledge networks to be formed within the framework of a project financed by the Swedish Knowledge Foundation (KK-stiftelsen) which aims at providing advanced training for SME entrepreneurs. The learning gained within various areas of knowledge here, the choice of developmental themes by participants, and the implementation in one's own business of the knowledge gained are to be investigated, as are gender differences in patterns of interaction within the networks and in how the networks are utilized. The project is based on action research theories, one aspect of which will be steering of the research process by the participants themselves and by democratic processes.

The project is to be led by University Lecturer Marianne Sökjer-Petersen, a member of the Sub department of Work and Organizational Psychology at the Department of Psychology of Lund University. The results obtained are planned to also serve as a basis for developing long-range research within the Sub department concerned with SME, particularly as regards gender, innovation and entrepreneurship.

TuS06: 4 Work, Lifestyle and Health among small-scale Entrepreneurs in middle Sweden

Anna-Lisa Hellsing, Sofia Loodh Dept of Occupational and Environmental Medicine, Unit for Small-Scale Enterprises, Örebro Medical Center Hospital, Sweden

Aims.

The aim of the project was to study the situation among small-scale entrepreneurs in the Örebroregion when they had been running their business for about five years. A main aim was to compare men and women as well as different branches and geographical areas. We were concerned about

correlations between the work environment-, lifestyle- and health variables among the entrepreneurs.

Methods.

In collaboration with Statistics Sweden we found those 795 enterprises with less than ten employees, which started 1993.

A specially designed four-page questionnaire was sent to the registered owner of the firm in February 1998.

Results.

The reply frequency, after two reminders, was 66% (515 firm owners, 64 women and 278 men). Out of the 515 who answered some were no longer active in their business. All analyses were therefore based on those 342 who were still active in the same business.

The branches were divided in Industrial production/building (90), Transport/trade (123) and 129 who were offering different kinds of Services.

About one third of both women and men were engaged in Transport/trade, Service-businesses engaged 53% of the women compared to 34% of the men, very few women had a Production/building-business.

Among those with a Service-business 49% also depended on another job, but only 17% of those with a Production/building-business.

The turnover for 1997 was divided in three classes:

- 1 Up to 300 000 SEKr.
- 2. Between 300 000 and 1 million SEKr
- 3. More than 1 million SEKr. The turnover differed between branches in that more than half of the Production/building firms belonged to the highest class, but only 38% of the Service-businesses. One third of the women belonged to the lowest class but only one fifth of the men.

Two thirds (62%) reported that they worked more than 40 h/w in their business.

Unfortunately the women were few, but some other comparisons could be made between women and men.

Frequent headache was reported by 13% of the men, but by only 9% of the women.

Frequent neck- and shoulder problems were reported by 42% of the women, but by only 27% of the men.

Frequent low back pain was reported equally often by women as by men.

Sleep disturbances and eye problems were reported more frequently by women than by men.

To often work at high stress, but also to experience the job as interesting and stimulating was reported equally often by men and women.

There were no big differences between men and women concerning how often they had the possibility to discuss problems with someone or if they had someone to ask for help when the work was intense.

Among the women 22% were smokers, but only 14% among the men. Snuffing was instead much more common among the men than among the women.

Conclusions

Within this selected group of small-scale entrepreneurs the comparison between men and women differed concerning health variables from population-based surveys. The women did not report

more symptoms or health-complains than the men. Men and women also gave similar answers concerning the psychosocial work environment.

TuS06: 5 Is starting of own Business a Strategy of Integration in Work life for Immigrant Women in Sweden?

Saeid Abbasian

National Institute for Working Life, Sweden

Immigrant women's start of own businesses in Sweden is a new and so far unresearched area. They are a special category in research on entrepreneurship; they are both women, immigrants and entrepreneurs. So far research on entrepreneurs has either concerned Swedish native born women or immigrants in general. In the first case focus is on Swedish women as the norm and immigrant women are invisible. In the second case focus is often on the immigrant men as the norm and their wives, mothers, sisters and daughters are invisible more or less. That's why I decided to do this study. My study is based on two types of interview investigations; one with experts on labor market and the other with some entrepreneur women from Iran, Turkey and Chile. These women have their businesses in Stockholm's region.

The aims of the study:

To analyze and identify immigrant women's starting of own business as a strategy of integration in work life,

To find out immigrant women's motives for start of own businesses in Sweden.

The main questions of my study are as follows:

1. Why these women have started own businesses?

How do they start and under which conditions they work? Do they have access to any social network?

Is starting of own business a good way for these women to be integrated in work life? Do they have use of their own qualifications there? Are they satisfied for having such kind of job?

Are there any differences/similarities between these groups of women and Swedish women in their starting of own business and in relation to work conditions?

These aspects of immigrant women's entrepreneurship will be discussed at the congress.

TuS06: 6 Women Entrepreneurs in a Developing Economy

Preeti Singh

Jesus And Mary College.New Dehli, India

Small business and entrepreneurship in India are the prime-force in generating productive employment and ensuring a more equitable distribution of Income in the process of economic development of the country. It facilitates effective mobilization of resources of capital and skills and helps to reduce poverty and unemployment.

India is in a critical transition phase in its development process. At this juncture the importance of the indomitable, courageous, educated women in the work spheres cannot be undermined. This study draws attention towards women entrepreneurs, their family and educational backgrounds, their problems at work and at home. It also reflects their motivation attitude and commitment to work. It analyses the decision making powers, perceptions and constraints under which women work. The focus of this study is on the role of women as owners of small business, their methodologies at work and the balance with family life.

This study is based on primary data personally collected through questionnaires and interviews of 50 women entrepreneurs. It covers both traditional stereotype business ventures and non-traditional areas of business activity in which women are engaged. It is limited to business enterprises up to Rs.10 million. Research on women entrepreneurs was especially selected because of the independent nature of work processes, gaps in empirical research and bias against working women. This paper is an attempt to explore value of women's work in a patriarchal Society. It also reflects the changes in attitudes and perceptions of the role of women at home and at work.

Incorporating women's views and their perceptions on issues affecting their lives can be a major contribution to knowledge and action. The concern for equity and justice for women in a developing economy is based on inequalities and injustices on Women in the socio-economic transformation process in India. This study would help in linking gender, economic development and Social transformation.

TuS06: 7 Women re-entering the Labour Force by starting a Company of their own

Marieke de Feyter TNO Arbeid, Hoofddorp, Netherlands

Women re-entering the labour force can benefit from opening their own business. As entrepreneurs, they often have more employment opportunities that better match their experience and interests than they would as employees. This is apparent from a study – conducted by the Centre for Occupational Safety and Health of the Netherlands Organisation for Applied Scientific Research (TNO Arbeid) during the year 2000 – into the background and experiences of men and women above the age of 45 who opted to become entrepreneurs. A portion of the respondents involved individuals whom, after a period of unemployment, re-entered the labour force through a company of their own.

The lecture explores such questions as: What are the reasons why individuals re-entering the labour force opt to open their own business? What types of businesses do they pursue and what type of assistance do they need during start-up? What are the company results of these enterprises? Do the companies started by those re-entering the labour force differ from those of other individuals above the age of 45?

In addition, the lecture addresses initiatives within the Netherlands that promote entrepreneurship among women re-entering the labour force and the first reports from these efforts.

TuS07: Women Academics

Chair: Elisabeth Berg and Jim Barry

TuS07: 1Women Academics, The New Public Management and Stress: A Case Study of Higher Education in Sweden and England

Elisabeth Berg Luleå University of Technology , Sweden

Two papers, which report on research developed by members of the European Network on Higher Education and Managerialism, will be presented in this Workshop. These papers will be presented and Chaired by members of the Network. Each paper will be allocated 45 minutes. Presentations will last between 20 and 25 minutes, to be followed by discussion - with the full participation of those attending encouraged.

TuS07:2 Nice Work or Hard Labour? Gender and Higher Education in Sweden and England

Elisabeth Berg, Luleå University of Technology, Sweden

This paper is concerned with exploring the changing character of work in higher education in Sweden and England. A study of this kind is timely not least because both countries have been subjected to a series of changes in recent years in their respective public sectors (Berg 2000; Clarke and Newman 1997) - with universities, according to some sources, significantly affected (Barry, Chandler and Clark 2001; Askling 1999; Fogelberg et al 1999; Prichard and Willmott 1997; Parker and Jary 1995).

Yet the implications for female academics is only belatedly being recognised (Goode and Bgilhole 1998; Morley 1999; Edgren 1999; Clark, Chandler and Barry 1999; Berg 2001). The paper accordingly extends existing research by conceptualising areas of academic responsibility along the following dimensions: *dog* work, *tough* work, *care* work, *real* work and *nice* work respectively, in order to explore the changing character of intellectual labour and the gendered implications.

Undervalued in relation to other areas of intellectual labour administrative or *dog work* has always been the province of academics, especially during their early years in the job when they take their turn as others before them. Recent years have seen a growth in routinised tasks with increasing bureaucratisation and seemingly endless paper trails attending peer review of quality audits as trust in professional discretion recedes (Power 1997). Increasingly administration is *delegated to* junior colleagues and administrators (or student support managers), often *women*.

Organising the work of professional colleagues has likewise traditionally been the province of academics. Arranging timetables and 'persuading' colleagues to undertake heavy teaching loads and committee work has always been difficult and burdensome for those responsible. This *tough work* has recently been on the increase as Heads of Department, now seen as middle managers, are exhorted to manage the work of their junior colleagues, delegating academic leadership as necessary (Jarrett 1985). Where enacted in *hard or brutal ways the gendered element* of tough work becomes clear (Gilligan 1982; Rosener 1990; White 1995).

Care work has been thought traditionally to be a significant factor in supporting students at university and reducing the wastage rates associated with systems of mass higher education (Halsey 1995). The pressures to massify into a New Higher Education system (Parker and Jary 1995) appear to have had a *deleterious effect with those most affected being women*, both as tutors and students (Cotterill and Waterhouse 1998). These are the staff forced to deal with the harder realities of daily life on campus for the newly (dis)possessed student 'customers'.

Real work has historically characterised the role of academic labour, as lecturers seek to develop the spirit of intellectual enquiry and joy of learning in their students. In the face of attempts to speed up academic production, and make the job harder (Morley 1999:166), intellectual workers resist through trade union action, collegial support for one another and control of working patterns, taking work home where they can at least manage their time to some degree, and maintaining responsibility for content of lectures, seminars and tutorials as numbers grow. Here the greatest number of hours are invariably worked by the most junior lecturing staff who are women.

Nice work on the other hand has offered sanctuary, an escape route to the pleasures of reflection where independence remains intact. And it is here too that *men outnumber women* in senior research positions. Whilst there may exist illusion in the dream of independence, as pressure for published output and income generation through research grants grows and makes the work much *harder* than it was before, it remains *nice* work if you can get it, perhaps the final refuge of beleaguered, predominantly male, academics keen to maintain professional autonomy. And it here that *women are excluded* - not just in Sweden and England but in many other countries around the world (Clark, Barry and Chandler 1998:209).

The data for the paper derives from a series of in-depth interviews with female and male academics in middle management positions in Sweden and England in order to give voice to their experience of these recent changes.

TuS07: 3 Abstract: Intensification and Reflection: Gender and the Management of Change in Academia in Sweden and England

Jim Barry University of East London, England

If popular representations are to be believed workers in the west are experiencing the growth of personal anxiety and angst on a scale previously unimagined. With increases in flexible working and dual-careers, the intensification of work-load and enhanced levels of audit and related surveillance, not to mention the accelerated demands of family and leisure, we may even be witnessing the development of *The Stressed Society*. But how far can we accept popular (re)presentations? Are they merely hollow stereotypes, perhaps moral panics? Do they mask a deeper concern about intensification which threatens to disturb ways of being and patterns of reflection? And what are the implications for women in all this?

Popularised by a group of academics who have been labelled 'work psychologists' (Hollway 1995) the study of 'stress' at work has of late become a topic of widespread interest. This has been noticeable among managers keen to account for the health of their workforces through the provision of fitness centres and the employment of 'stress' consultants to advise on diet and lifestyle. It is perhaps telling that 'managers, not psychologists, are the largest group who practice, and are

trained in, work psychology' (op cit:38). Yet an agreed definition of 'stress' remains elusive. It is unclear precisely what constitutes 'stress' let alone whether or not 'stress' is on the increase for workers in contemporary organisations.

It is this with which the paper is concerned, exploring the issues in higher education in Sweden and England. A study of 'stress' in these two countries is apposite as both have been subjected to a series of changes in recent years in their respective public sectors (Berg 2000; Clarke and Newman 1997). With universities, according to some sources, significantly affected (Barry, Chandler and Clark 2001; Askling 1999; Fogelberg et al 1999; Prichard and Willmott 1997; Parker and Jary 1995). In both Sweden and England the move to systems of mass higher education have been accompanied by a decline in resource allocation alongside attempts to impose managerial techniques and control strategies which are thought to have their origins in the private sector. Characterised by some commentators as the New Public Management, or NPM, this movement for change has been felt in a number of different countries, not just those selected for consideration here (Hood 1995). But it is in countries such as these that its impact appears to have been most keenly felt (ibid), suggesting that they may act as appropriate vehicles for cross-cultural research.

The paper draws on a series of in-depth interviews with female and male academics in middle management positions. The paper also draws on academic advances, made by work psychologists (cf Davidson and Cooper 1992) from their research into stress, and attempts to move beyond the boundaries of conventional wisdom by reconceptualising stress in sociological terms. It also locates the study in context in order to examine the implications for women workers arising from the recent changes (Berg 2000).

The issues examined include increased workloads arising from the expansion of higher education, the use of managerial control strategies such as target setting, the speeding up of information flows through sophisticated IT systems, and enhanced forms of surveillance through audit and peer review. Academe in Sweden and England is located in context through an examination of institutional similarities and differences, with close attention paid to the participants own accounts of the implications for the professionals at the 'sharp end' of the reforms with close attention paid to the gendered implications.

Tus08: Women Work, Gender Inequality and Health

Chair: Valentina Bondarovska

Tus08:1 Women work, Gender Inequality, Health in Post-Totalitarian Society

Valentina Bondarovska Computer Ecology Association, Kyiv, Ukraine

Today the people who lived in the former Soviet Union or one of he countries of Eastern Europe under totalitarian regimes are trying to understand how their experiences have effected them. The *primary goal* of our researches was to identify the typical psychosocial constructs of people who lived under the communist totalitarian regime. We interested the psychological constructs of women position in the society, inside family, on workplaces.

A *secondary goal* of our researches and psychological practice was to use our results as a foundation for helping women in this region to build new psychological models oriented towards gender equality, creating the work and family life balance, overcoming the sexual harassment women discrimination on the workplace and women active participation in the political and social life. In the context of gender equality and human rights we were interesting also the relations between post-soviet women unpretentiousness, low self-esteem, readiness to bad work conditions and bad living conditions and real work and family disbalance.

We found that the "soviet" attitude towards work was a kind of duty. Work wasn't accepted as an important part of people's lives. What they developed was a tolerance towards bad working conditions, high workloads and belief in the projects undertaken by the government involved high risk to live.

Totalitarian person and the family, as a foundation of culture, played a very specific role in the development of the psychological model. The state encouraged the use of betrayal and treachery between family members to enforce its totalitarian power. The notion of a "proletariat" or "bourgeous" family origin was a key factor in the state attempt to destroy family.

Then came the incalculable traumas of World War II then millions and millions of families were left without men. Women accepted the difficult role of family leader creating a matriarchal model of dominatory family structure. During post-war period and later (as some kind of social relay-race) women experienced conflicting messages about the rights of women on one hand (assigned the hardest and most difficult kinds of work) and the reality that were the head of the family.

The participants of the symposium will discuss the behavior models and psychological and social issues of the soviet consequences for human beliefs, feelings, relationships, real gender situation and the peculiarities of the post-soviet women and men attitudes for the main features of the democratic human life.

Tus08:2 Woman as robot: functional roles, behavior models and emotional crisis's

Helene Voziyanova International Humanitarian Center "ROZRADA" Kyiv, Ukraine

Nowadays woman in post-soviet society has the specific social and family situation – she needs to work, to manage family life, to be sexual partner, the teacher for her children etc. Really her life is similar to some robot's life with the strong schedule, high level responsibility and absence of rest. Women read and head about gender equality but social and legal situation at the time of transition stay almost the same as at the soviet time.

The *objective* of our investigation was to study the functional roles, behavior models, inner conflicts between the dream about gender equality and reality, emotional crisis's of women who are working hard, play many family roles and really never rest. Subjects: 23 women after 30, married and single mothers.

Methods. We used the projective and diagnostic methods, such as Lusher's test, test "House, tree and person", "Unknown animal"; the method of the family matrix; the different kinds of compositions and messages and methods of gestalt –therapy, symbol-drama and psychological consulting.

Results. As we could see 90% Ukrainian women after 30 live as "robot", play so many roles that their behavior models are often aggressive or are as some models of suppressed aggression. They feel that are bad mother, bad wife and bad sex partner. They often have feeling of guilty. From other hand, women would like that their partner divide their responsibility for family life but in post-soviet culture there are not any tools of peaceful conflict resolution and communication.

Tus08:3 Occupational hygienic exposures and health effects of women's work as computer users

Valentina Bondarovska Computer Ecology Association, Kyiv, Ukraine

It is known that the "soviet" attitude towards work was a kind of duty. It was developed some kind of soviet people, especially women tolerance towards bad working conditions, high work loads and belief in the projects undertaken by the communist government involved high risk to live, such as, for instance, the transformation of nature in order to achieve some grand goal. In this context women-computer users are ready to work VDU more then 8 hours per day, some of them 12 hours and have any experience in supporting their occupational health.

The objective of our research was to study state of health of women-computer users on the multidisciplinary background.

Methods. We used methods of estimation: immune status, ophtalmological status, psychophisiological parameters of fatigue, the secretion of adrenalin and noradrenalin in subjects' urine, psychosocial status (Kosugo-Fudjigaki method), energetic status (Kyrlian effect). We also ergonomically estimated of our subject's workplaces.

Subjects: 90 women-computer users and 30 office workers (control group).

Results. In ergonomics context we received the whole picture of working life style and work conditions of typical women-computer users'. We received the data about their health state when they are working with VDU at the different periods of time (from 4 to 12 hours per day), have the different work tasks and different work conditions. We established a special approach to design the psychological and ergonomics space of women- VDU users and realized this approach in some enterprises and offices.

We also received data about work and family balance of our subjects as function of their work organization and the duration of their working day.

Tus08:4 Working women inner balance: Social roles and the problem of life resources

Katerina Babenko

International Humanitarian Center "Rozrada", Kyiv, Ukraine

Changing in economical and social life had the great influence to the role and place of women in the society. The spreading of the idea of "gender equality" raised the necessity for the society as well as to each dual-carrier partners to find the new solutions of the problem of women balance between work, family and personal needs.

Our *objective* was to study the typical models of the combination of work, family life and personal needs and analysis of attitudes that prevent women of finding of balance between these spheres and that prevent women to support their own state of health and to create the life style with balance between work, family life and her own satisfaction of life.

Methods. We provided the analysis of society accepted models (social attitudes, demands and expectations towards woman and the way she combines different spheres of her life); diagnostic (projective tests) and consulting work with working women (20 persons).

Results. As it was seen from the diagnostic materials the majority of women describe themselves only through the set of different social roles losing the contact with their inner needs and resources. There were find the typical attitudes that lead to the inner disbalance of women and her exhaustion and loosing of satisfaction. One of the main problems of the disbalance is the hyper-responsibility of women. Having the necessity to combine work, social and family life and her own personal needs she usually combines these spheres in the way where her personal needs take the last place. The pressure of the analyzed social models of "good wife", "good worker", and "good mother" support this attitude. These lead to the high level of life dissatisfaction, depressions, etc. From the other hand the necessity of responsibilities distribution faces the problem of the absence of partner skills in the family and often lead to the increasing of family conflicts and even to the divorce due to the decreasing of value of the "family". So, society and women face the problem of finding new models of family existing that could support working women.

Tus08:5 The work and family disbalance of Business ladies life in the Post-Soviet countries

Inna Didkovska

International Humanitarian Center "ROZRADA", Kyiv, Ukraine

Business-ladies are the new business generation in the post-soviet countries. Some women took up the top positions inside business without any help and support from the social system. It was appeared quit new for post-soviet society problem – to determine the work and family balance, to keep the normal state of health.

The *objective* of our investigation was to study the psychological peculiarities of new business-ladies generation behavior models and life style in post-soviet society.

Methods. We used the psycho-diagnostic methods of measurement of the emotional, behavioural and intellectual status of business-ladies; psychological consulting and support methods of work and family balance determination, stress-management.

Subjects: 15 top-level business-ladies who asked for psychological help in the situation of the work, family and health disbalance.

Results. It was recognized that the most of our subjects are spending about 12-15 hours per day in their office. One of the consequences of this situation very often is the emotional and physical break down. From other hand family life style stay the same as was before. Husband would like to control each step of his wife and children, he is not ready to do some part of housework, believe that woman need to be responsible for the whole family life. This situation is the cause of deep inner problem of post-soviet business-ladies.

Conclusion. People in post-soviet society need to change their life style stereotypes, family life models, begin to believe in the gender equality in the all spheres of human being.

Tus08:6 The professional Realization Difficulties of Ukrainian Women-Victims of Domestic Violence

Tatiana Kulbachka

International Humanitarian Center "ROZRADA", Kyiv, Ukraine

There are many difficulties in the professional realization of women in post-totalitarian society. Many years soviet people lived in the closed information space. It was not known how often in soviet families there are domestic violence of different kind. People could recognized some types of physical violence but almost never psychological violence. Really soviet woman lived under press not only of general social violence but also under press of deep and strong domestic violence. The objective of our investigation was to study the peculiarities of the professional realization of Ukrainian women-victims of domestic violence.

Methods. We used the methods of psychological consulting of women who decided to stop circle of domestic violence and psychological support of their efforts to find their-selves on the labor market.

Subjects -45 women of 30 - 55 age.

Results. The most women who asked for psychological help were really victims not only of violence in their own families but were also abused children. These women could receive the university education but could never realize their-selves on the labor market. Their husbands

controlled their behaviour, their feelings and told them that the main woman's tasks are children and housework (very hard house work with specific "soviet home technologies").

The more strain situation there is nowadays inside the families of so-named "new-Ukrainians", where husband controls each step of his wife. We could recognize also the high level of psychosomatic diseases of these women.

Conclusion. It is necessary to realize the social actions for recognizing real situation with domestic violence in the post-totalitarian post-soviet society. Women-victims of domestic violence need the individual and group psychological support at the period of her recognizing of her inner situation and adaptation to labor market life.

TUS09: Segregation, health and work: improving conditions for women in Canada, Sweden, and the US

Chair: Meg A. Bond, Co-Chair Carina Bildt

TUS09: 1 Discrimination, health and work: improving conditions for women in Canada, Sweden, and the US

Meg A. Bond, Carina Bildt University of Massachusetts Lowell, Swedish National Institute for Working Life;

The effect of gainful employment on women's health has been studied by several researchers, and various benefits have been identified. Nevertheless, the ways that women's working conditions and living conditions differ from men's also have some negative health implications. Due to gender segregation and inequality, both in the labor market overall and within individual workplaces, women often hold jobs characterized by high demands and low decision latitude, monotonous and repetitive work, few opportunities for growth and development, and low salaries. These indicators of low status are highly correlated with high job stress. This, plus women's double burden of both paid and unpaid work (enhanced by inequality in the family) represents a serious threat to women's health, both mental and physical. Some interventions have been carried out, typically focused on the individual: teaching better coping skills and stress reduction techniques. However, the research cited above implies that interventions foremost should be directed at the organization of work, Gender segregation, and inequality in the workplace.

The symposium consists of five papers addressing relationships among discrimination, work conditions, and women's health. Collectively the papers draw from action research projects in three countries -- Canada, Sweden, and the United States - to describe the health implications of a wide range of factors that make work environments stressful for women. The first paper describes the stress and health issues faced by women with short-term teaching contracts in Quebec, Canada. It summarizes the results of a collaborative union-university study of the unique challenges faced by short-term workers, health consequences, and the importance of mutual support and collective action for addressing concerns. The next three papers all describe aspects of an extensive survey of workers in one region in Sweden. One provides the macro level overview, concentrating on the regional labor market, changes in employment trends, and employment policies in Sweden. The other two speakers will describe case studies of the health implications of structural obstacles facing women in the workplace. They also highlight potential strategies for organizational change to improve physical and psychosocial conditions. The final paper describes research on the relationship between discrimination and health and work for employees of a US university, and explores action implications. Action implications of all the research projects presented will be explored.

TUS09: 2 Facilitating solidarity among unionized women with short-term contracts in Ouébec

Karen Messing, Ana Maria Seifert CINBIOSE, Université du Québec à Montréal, Canada

As part of a collaborative union-university research program on women's occupational health, the Québec Teachers' Union requested a study of teachers doing short-term contracts in adult education (AE). School boards in Québec employ more than 5000 AE teachers, of whom three quarters are women and fewer than 10% have permanent full-time jobs. The research team used methods of ergonomic analysis adapted from those used at the Conservatoire National des Arts et Métiers in Paris. These methods had been previously employed with some success in a collaborative project with elementary school teachers. The aim of the method is to generate a global portrait of work activity that can be used to suggest changes in determinants of health problems. The team held collective and individual interviews with key informants and with teachers; collected background information on the context of AE in an immigrant-dominated urban setting; distributed questionnaires to students on their origins and educational history; observed 14 classes for a total of more than 60 hours; did in-depth 90-minute semi-structured interviews with 14 teachers; and validated the report with teachers from other regions and milieux.

The study concluded that AE teachers face a highly diverse student population with serious economic, social, and academic problems. Disciplining adult students poses a special challenge, due to contradictions between adult and pupil status. Stress from economic insecurity, inadequate materials, poor classroom environment, tense work relations and fear of violence were reported. Economic insecurity was dealt with by multiple jobs and contracts, often with consequent overload. Plans for having children and making major family purchases were postponed, sometimes indefinitely. Pedagogical problems were solved using various teaching techniques, but collaborative methods were used infrequently due to the intense rivalry with colleagues for jobs. Health implications accompany these multiple stresses.

Determinants of health problems that could be used to suggest solutions included: inadequate pedagogical support; short-term contracts with no employment security; poor relations with supervisors; union activities which concentrated on technical support (negotiating better conditions and enforcing the collective agreement) than on in-school working conditions. Teachers could employ individual competitive strategies or collaborative strategies in facing competition. The team proposed that the union do more to promote solidarity, mutual support and collective solutions, and that the employer provide better support, an improved environment and changes in employment conditions.

TUS09: 3 Gender, work, and health: a regional research & development project

Lena Gonäs

National Institute for Working Life, Stockholm, Sweden.

During the last decade, the Swedish labor market has undergone a severe transformation. The economic crisis that hit the country in the beginning of the decade caused an increase in the unemployment levels for both women and men, at first, in the manufacturing, building, and construction industries. Change followed in the public sector, both in the number of employees and in the way production was organized. By the end of the decade, the situation had changed, and

there was a labor shortage in certain occupations and regions (i.e., in the major metropolitan areas, both in new occupations in IT-industry and in more traditional occupations like nursing and teaching). Swedish women have almost the same employment rate as men, but the labor market is very segregated. Women are predominantly employed in the service sector and/or the public sector in health, education, and child and elder care. These employment patterns (i.e., a situation with both labor shortage and unemployment) point to the importance of regionally specific analyses of gender patterns. In addition, since gender segregation at work is associated with both differential exposures to health and safety hazards and higher rates of absenteeism for both men and women, the mental and physical health status in the female workforce may be expected to vary tremendously among these subgroups of the economy.

This paper describes an action-oriented, regional research project that involves collaboration between researchers and practitioners. The local actors have contributed with knowledge based on local conditions; researchers with gender theoretical perspectives, concepts, and general knowledge about working life, health, and organization. The overall aim is to study the origin of segregation, inequity, and gender-related ill health within the region and what mechanisms maintain deficiencies in equal opportunity. The central questions are: 1) What changes have taken place in the 1990s labor market and in work organizations, and how have these changes affected gender-based segregation patterns, working and living conditions, and health? 2) In what way does gender segregation affect different types of employment, working conditions, means of influence, and health/ill-health for women and men? 3) What are the regional factors that influence these patterns? 4) And how can local actors within the framework of existing institutions and regulations affect the health and work outcomes for women through change in the gender segregation of the labor market and within organizations? The six-year project involves gathering both quantitative and qualitative data. The project brings together multidisciplinary competence from the fields of social science, behavioral, and medical science.

TUS09: 4 Organizational and Individual Obstacles for Women in the Metal Industry

Carina Bildt, Ph.D., & Lena Karlqvist, Ph.D., National Institute for Working Life, Stockholm, Sweden

The study took place at a company within the metal industry in a small municipality in Sweden. The management had encountered problems with having female employees participate in job rotation within the cutter department. Women performed only checker and planning tasks, but the men performed packing and cutter tasks as well as checking and planning. The goals of the study were to examine a) individual and organizational obstacles that prevent women from choosing particular work tasks within the company and b) the health implications associated with various choices about work tasks.

Twelve operators, six women and six men, and two supervisors were interviewed using a 45-minute, structured interview. The questions concerned work tasks that they did and did not perform, as well as their experience of the physical, psychological, know-how, and personality demands of the different work tasks. Work-related injuries were also assessed. Most of the operators interviewed had worked within the company for 10-20 years.

Most of the female operators had been doing the same or similar work tasks for many years, and several of them had musculoskeletal problems from that work. Nevertheless, they had little interest in rotating among different work tasks. More women than men described the cutter tasks as

physically demanding and reported being afraid of the cutter machine; both of these factors were reported as possibly reasons why women chose to work only in checking and planning. However, during the last ten years, the company had initiated several changes that reduced the physical demands in both packing and cutting, and today the actual physical demands in the cutter tasks are moderate. Still, several of the women and some of the men believed that the cutter tasks were too physically demanding for women to perform. These beliefs seemed to serve as a barrier to women diversifying their work. The only woman to have been hired by the company during the last five years, 19 years old, had a totally different attitude and wanted to learn all of the work tasks in the cutter department. This suggests that one solution to the problem is for the company to start to employ women and then immediately train them to learn all work tasks within the department. The female employees could thereby gain a broader competence, with the additional benefits of increased security within the company and enhanced mental and physical well being. The paper will analyze the health implications of the gendered division of labor within the company as well as consider how the gender-based division is maintained by outdated beliefs about the nature and demands of particular tasks.

TUS09: 5 Organizational Change as a Tool for decreasing Work Demands

Lena Karlqvist Carina Bildt National Institute for Working Life, Stockholm, Sweden

During the last several years in Sweden, the distribution of hot meals has become a service commonly offered to old people who are living at home but no longer able to prepare their own food. Organizations that provide this type of distribution have been built up in several Swedish municipalities, and almost all of the food distributors are women who work part-time. The aim of the current study was to describe the physical and psychosocial working conditions experienced by these employees in one organization, to compare them to those of other employees in the same organization, and to suggest solutions to the problems identified. In the municipality where the present study took place, both the employer and the workers themselves thought that the job detrimental to health. In fact, during the study, one food distribution worker was on long-term sick leave. Data on physical working conditions were collected through whole day observations, direct measurement of pulse and number of steps taken per working day, and self-rating of perceived exertion. Five food distributors, three cooks and two cleaners participated in the study – all female. Structured interviews focused on psychosocial working conditions as well as employees' own suggested solutions.

The food distributors indeed had very stressful and demanding working conditions. The psychosocial environment was characterized by high mental demands and low decision latitude, time pressure, and difficulty meeting production expectations. Food distributors scored very high on the self-rated perceived exertion scale. Increase in heart rate, relative to individuals' possible maximal value (%HRR), showed extremely high mean values compared to other groups. The combination of demanding psychosocial and physical working conditions is a cause for concern. The interviews indicated that the demand for meal distribution would increase rather than decrease in the future. Thus the working conditions for food distributors must allow them to work over a number of years and still remain healthy. A short-term solution could be to employ more food distributors and provide additional resources for doing the job (e.g., lease an additional car). Then the total workload would decrease per employee and be more evenly distributed during the day. A

long-term solution to the problem would involve more widespread organizational change. For example, jobs could be redesigned to combine food distribution tasks with others such as work in the hospital kitchen or cleaning. Such combinations would vary task demands and distribute them more evenly over the workday and would also convert the position to a full-time job with a livable salary. A number of organisational changes were implemented as a result of our suggestions, and the work situation for the food distributors was markedly improved when we did a one-year follow-up.

TUS09: 6 Discrimination, Health, and Work outcomes: Connections and Implications from a US study

Meg A. Bond, Jean L. Pyle, Laura Punnett, University of Massachusetts Lowell

The literature provides few multidisciplinary analyses of how women's experiences in the workplace (discrimination, gender segregation) and family-work imbalance affect health and organizational outcomes such as job satisfaction or withdrawal, turnover and other costs. This project seeks to bridge disciplinary barriers and to compile findings from disparate methodologies (community psychology, regional economics, epidemiology, ergonomics) to explore links among 1) gender-based discrimination and sexual harassment (blatant, subtle, or covert); 2) stress and adverse health outcomes for women; and 3) organizational outcomes and costs. We work from an integrated model of the relationships between discrimination and harassment, organizational factors that facilitate or constrain effective diversity in the workplace, and health and workplace outcomes.

The study reported here surveyed 760 employees of a large state university in the Northeastern United States, to test selected components of the theoretical model. We received 221 completed survey responses from non-faculty, non-graduate student staff (approximately 29% response rate). Participants were in administrative, clerical, custodial, and security positions. The questionnaire included items from validated survey instruments such as the Karasek-Theorell Job Content Questionnaire, the Riger and Stokes Work Environment Scale, the Mental Health Index, and the SF-12. New items were developed, as needed, to assess people's experiences of occupational racial or ethnic discrimination and/or work environment factors with a likely disparate impact on women. Preliminary analyses point to the importance of work climate for health and work outcomes and to the importance of workplace supports and sense of community at work as mediators of the relationship between discriminatory work climate and health and work outcomes.

TuP04: Chemical Exposures and Health Effects, 2

TuP04:1 Retrospective analysis of Occupational Diseases of Woman Exposed to Organic Solvents in Latvia between 1985 and 2000

Arturs Veide

Institute of Environmental and Occupational Health, Medical Academy of Latvia

Background. Organic solvents are harmful, irreplaceable industrial poisons, widely used in Latvian industry. During year 2000 there was three-fold increase in occupational disease caused by organic solvents if compared to previous years.

Aim. The aim of this study was to determine the occupational health disorders among women exposed to organic solvents in Latvia from 1985 till 2000 and to stratify them by industry, occupation and work conditions.

Materials and methods. A cohort study was performed using data of the State Register of Occupational Diseases of Latvia. The Register contains accumulated information 2.008 patients with occupational diseases, their diagnosis, year of diagnosis, age, sex, diagnosis, complications, workplace, standing, harmful factors and their concentrations. Health status of registered patients has been evaluated and controlled using clinical and physiological examinations, and alergological and immunological tests. All measurements and analyses were performed in the Institute of Occupational and Environmental Health. The data were statistically analyzed using SPSS statistical software.

Results and discussion. 105 patients who had a disease caused by exposure to organic solvents were extracted (10,1 cases per 100.000 economically active persons). 33,3% were registered during year 2000. 53,3% (56 cases) were females. The average age of females under the study was 53 years old. For 28% of patients length from the beginning of solvent exposure till the diagnosis did not exceed 10 years. The study did not reveal some specific occupation, where health impairment would be more frequent. Most of the subjects worked in industries, such as textile, leather, glass, paper, chemical fiber, furniture, paint and metal production. Aromatic hydrocarbons were the most prevalent exposure among study group (64,7%). The most respiratory, allergic and neurological diseases were registered as a result of solvent exposure.

Conclusions. Exposure to organic solvent remains a problem in Latvian industry. Slightly more women are registered with occupational diseases caused by organic solvents. This study did not reveal specific occupations related to organic-solvent caused health problems.

TuP04:2 Assessment of health disorders among exposed to organic solvents in dry cleaning

Arturs Veide, Marite-Arija Bake and Zanna Linnika Institute of Environmental and Occupational Health, Medical Academy of Latvia

Introduction. Different organic solvents are used in dry cleaning of textiles. Tetrachloroethylene (TeCE) is one of the most common organic hydrocarbons routinely used in dry cleaning. High concentrations of organic solvents may cause serious health problems in exposed population. TeCE is used as dry cleaning agent since 1900-ties in Latvia. There is any information concerning the

health problems of exposed workers. Women are the most frequently employed persons in dry cleaning enterprises. The diagnostic procedure of health problems related to solvent exposure includes analysis of clinical symptoms related to measurements of total concentration of solvent mix in a workplace, therefor diagnosis usually is delayed. For early diagnostics, there is a need for more precise evaluation of each separate solvent and correspondent health disorders.

The aim of study was to evaluate early health disorders of exposed persons and to prove the biological monitoring as the further indicator of health problems caused by organic solvents.

Materials and methods. The study population included workers (N=41) of dry cleaning enterprise, where organic solvents are used on regular base. Medical examination was used to reveal the health problems of exposed workers. Medical examination included clinical and physiological examination, alergological and laboratory tests. Following specialists: occupational, internal diseases and ENT physician, neurologist, dermatologist, ophthalmologist and gynaecologist filled in the specifically designed questionnaire. Also subjective information on health complaints and occurrence of neuro psychological symptoms, as well as passport data were filled in the questionnaire. The concentration of organic solvents in exhaled air and solvent concentration in blood were determined for every subject. Exhaled air was sampled in middle of a shift in pneumatic balloon with subsequent concentration of volatiles on charcoal tubes. The concentrations of solvents in blood was determined using solid phase microextraction for one hour and desorption from fibre for one minute in injector of GC. The analysis of biologic samples was performed by the gas chromatographic (GC - Varian 3800, FID). The concentration of organic solvents in workplace air was done using GC. Air samples were collected with individual samplers on standard charcoal tubes. Additionally, he temperature, humidity and workload was determined.

Results. 87,8% of observed dray cleaners were female and 12.2% - male. Mean age was 40.2 ± 11.3 years, length of service 5.8 ± 5.0 . Twenty-five percent workers were smokers. The subjects were stratified in three subgroups according to TeCE exposure in workplace: high exposure (254,0 ± 104 ,4 mg/m³), medium exposure (40,7 ± 39 ,5 mg/m³) and low exposure (14,8 ± 8 ,5 mg/m³). Toluene (0.4 ± 0.3 mg/m³), xylene (0.2 ± 0.1 mg/m³), chloroform (1.4 ± 0.9 mg/m³), trichloroethylene (6.9 ± 3.8 mg/m³) were determined in the work environment too in case of use complex organic solvents for spot removal. Statistical analysis showed linear correlation of TeCE concentration in exhaled air with TeCE concentration in work environment (R²=0.697), as well as concentration of TeCE in blood of surveyed groups with TeCE concentration in exhaled air (R²=0.95). The analysis of health status showed that development of eyes, nose/throat and skin irritation is related to TeCE exposure. High TeCE exposure was positively related to symptoms form neural system. Dose-response relationship was observed between exposure and increased activity of alanine transaminase. The following diseases - arterial hypertension, conjunctivitis, and upper respiratory tract diseases were positively related to exposure level.

Conclusions. The results of this study show that biological monitoring (concentration of organic solvents in blood and exhaled air) is more sensitive method to early diagnose organic solvent caused health disorders. This method could be used in conjunction with an evaluation of work conditions and health status of workers. The results are important to develop new criteria for surveillance of organic solvents at work places and to recommend the biological monitoring as a routine procedure during compulsory health examinations for occupationally exposed persons.

TuP04:3 Acute pesticide poisonings among Costarican woman and men

Vaquerano Castro, B. D. Pan American Health Organization, San Jose, Costa Rica.

Introduction.

A ten-year project "occupational and environmental aspects of the exposure to pesticides in the Central American isthmus" (plagsalud) is being carried out in Costa Rica since 1994. The main target of this project is the reduction by 50% in pesticide-related illness in the course of the first 10 years, as well as supporting the implementation of alternatives in sustainable agriculture.

Aim.

The aim of this paper is to compare acute pesticide poisonings among women with cases reported among men during 2000 in Costa Rica.

Method.

The data collected by national epidemiological surveillance system was analyzed. The statistic analysis was assessed with epi info 6.

Local intersectorial and interinstitutional pesticide commission of Aguirre County identified women of villages and conducted participatory workshops. The women described their activities and provided complete information about the names of chemicals products that they used at home.

Results.

The total number of pesticide poisonings reported in 2000, were 752. The largest percentage occurred in males 77.8% (585 cases), 257 (43.9%) of them were work related poisonings. The cases of pesticide intoxications on women was 167 (22.2% of total), 40.9% of them were non-work related accidents and 38.8% were suicide attempts. The age group most attended in males was 25-29. For women was 0-4 years old interval. The main pesticides were paraquat, carbofuran and glyphosate among men and on women were paraquat, propoxur and metomil. The principal place of pesticide intoxications for females was in the home.

At the beginning of the workshops women ignored their current exposure to several types of pesticides used on the farms, around and at home, and less so the consequences of exposure for them and their families. After training workshops the women reported visible knowledge. Furthermore, women could identify useful intervention measures.

Conclusions.

The results suggest that exposure to pesticides and its health effects among women were underestimated and occurred in a different manner than in men. This indicates that we have must be applied changes in training and research in order to involve women. Broader framework and methodological innovations including participatory research provided detailed and valuable information.

A study to combine the use of developed methodology with biological monitoring and monitoring of early adverse effects should be considered

TuP04:4 Occupational Exposure to Pesticides in Flower Farms in Northern Tanzania

AVF Ngowi

Tropical Pesticides Research Institute, Arusha, Tanzania¹

Monitoring of pesticide health hazards resulting from pesticides handling in agriculture and public health in Tanzania is carried out by the Tropical Pesticides Research Institute (TPRI) to identify areas needing intervention. Symptoms related to pesticide exposure presented by women workers in flower farms in Northern Tanzania during 1998 and 1999 are reported to provide a basis for concern of the workers' overexposure. The study was cross-sectional involving 245 female workers drawn from a population of about 1,914 workers in 10 flower farms. Exposure assessment was based on job description with exposed population including subjects doing actual spraying, harvesting, grading, storekeeping and packaging. The workers were interviewed on work activities, use of personal protective gear and symptoms. An inventory of pesticides used in the farms was also taken. The women were exposed to pesticides while handling flowers or working in sprayed greenhouses. A high proportion were temporary employees without appropriate protective gear and they were unaware of the dangers of pesticide exposure, so did nothing to alleviate their condition.

About 96 pesticide active ingredients in more than 124 formulations were in stock. Of these 39% were insecticides, 36% fungicides, 16% acaricides, 7% nematicides and 6% herbicides. About 23% of the pesticides found in the farms were not registered in Tanzania and 20 % were registered under experimental use category. World Health Organization Class 1a (extremely hazardous) and 1b (highly hazardous) pesticides stocked included carbofuran, dichlorvos, methomyl, fenamiphos and oxamyl. Most common pesticide related symptoms reported were fatigue, headache, chest pain, dizziness, exhaustion and runny nose. Some of the symptoms were common in the general population in the study area. The assessment showed that no conclusion could be drawn to relate pesticide use and exposure based on health complaints only. Subsequent preventive intervention proposed were to observe recommendation provided on re-entry into sprayed areas, pregnant women should not work in green houses and when handling flowers workers should wear protective gear. The authorities were also advised to consult TPRI for pest control methods available and pesticides registered for use in the country, so as limit the number and amount of pesticides used as well as uses recommended pesticides. The need to investigate the health situation further, using biological monitoring and control groups is highlighted to substantiate the contribution of pesticides to the health effects. Other possible causes of reported symptoms could also be looked into in order to elucidate morbidity due to pesticides.

_

¹ Currently a doctoral student at the University of Tampere, School of Public Health, Finland

TuP04:5 The problem of reprotoxicants selectivity by hygienic rating and women work interdiction

Igor Sanotski

Institute of Work Medicine (Russian Academy of medical Science), Russia

Well known that all substances have reproductive toxicity in high doses as result of general toxic processes. More dangerous are the compounds, which disturb reproductive functions without general symptoms of exposition. The aim of investigation – to give the objective criterion for establishing the degree of reprotoxicants danger –selectivity of systemic action.

Methods: The thresholds of integral action of poisons were determined by the functional, biochemical, morphological investigation, including behavioural tests. The thresholds of gonad tropic and embriotropic activity were determined by OECD recommendations as well as Russian Methodical guidance (ovarian morphometry including amount of structure elements, connected tissue area and amount of basophiles; embryo microanatomy by Wilson and Douson (in Diban modification) and oth.)

Results: It was proposed a Zone of specific action=Lim integr./Lim spec. as indicator of danger. It was selected the substances with specific action on reproductive system: Ethylenimine (Zsp=Lim int./Lim sp=12), Chloroprene (12), Tetracycline (3), Dimethylformamid (3), Benz(a)pyrene (10), 2,4,5-T (40), Ethylenoxide (>1), Urethane (>1), Vinilchloride (>1), Phenol (>1). Classification of substances on selectivity was proposed:

Classes of danger	${ m Z}_{ m sp}$	(safety coefficient for MAC)
1. Extreme dangerous	>10	>50
11. High dangerous	:4-10	10-50
111. Middle dangerous	1-3	<10

Conclusion: the chemicals with high selectivity of reprotoxicity should be eliminated from the industry; women work should be forbidden.

TuP04:6 Are women more sensitive than men to 2-propanol and m-xylene vapours?

Lena Ernstgård, G. Johanson, National Institute for Working Life, Solna, and Uppsala University, E. Gullstrand, A. Löf, National Institute for Working Life, Solna, Sweden.

Background and Aim. Exposure to organic solvents is a potential health hazard to hundreds of millions of workers world-wide. A large portion of the workers are women. Roughly 9% of the Swedish workforce is exposed to solvents, about one third being females. In spite of this, studies on health effects of solvent have almost entirely been carried out in men. Thus, risk assessment and risk management, including occupational exposure limits, are based on findings in men. Women are therefore at risk of not being adequately protected, should they be more sensitive than men to chemical exposures. The aim of this study was to evaluate possible differences in subtle acute effects in women and men after controlled short-term chamber exposure to vapours of two typical solvents.

Method. Fifty six healthy volunteers (28 women and 28 men) were exposed to vapours of 2-propanol (,150 ppm), a water soluble solvent, *m*-xylene (, 50 ppm) a fat soluble solvent, and to clean air. The subjects were exposed at three different occasions, each time for 2 h at rest in an exposure chamber. Effect measurements (lung spirometry, diffusing capacity, acoustic rhinometry, colour vision and inflammatory markers in nasal lavage) were performed before, immediately after and 3 h after exposure. In addition, the subjects rated symptoms on visual analog scales in a questionnaire before, during and after the exposure. Blinking frequency was recorded before and during the exposure. Repeated measures ANOVA was used in the statistical analysis.

Results. Independent of sex, all 10 ratings (irritation, central nervous system symptoms, and smell) were significantly increased upon solvent exposure, as compared to the control exposure. Regardless of exposure, females had significantly higher ratings than men of fatigue, smell of solvent and discomfort in the throat or airways during the exposure day. Women showed a small but significant decrease in some pulmonary function parameters and a tendency of more nasal swelling than men, independent of exposure condition. However, there were no significant sex related differences regarding symptom ratings in response to the solvent exposure.

Conclusion. The results suggest that women may be more sensitive than men with respect to acute effects of solvents. However, the effects seen were subtle and of borderline significance, therefore firm conclusions are difficult to draw.

TuW12:Trafficking and Commercial Sex Work

TuW12: 1 Prostitution in Paraná – Entre Ríos – Argentina

Nora Das Biaggio

National University of Entre Ríos, Argentina

This research paper is based on socioanthropological exploratory studies concerning relationships in prostitution.

The processes of building up male and female subjectivities, will be analized according to the interaction established in the prostitute – client encounter.

The conditions of vulnerability and the stigmatization of the oppossing roles – prostitute – mother – wife - will be presented.

The strategies of power that women prostitutes build to challenge the patriarchal model will also be analized.

Finally, a diagnosis will be presented, in which the prostitution framework will reveal the ways of living of prostitutes and the characteristics of the sexual demand.

General Objetives:

To analize the social practices of prostitutes and clients, and their effect in the building-up of new subjectivities.

To start a new interpretation of the transformation of relationships through the link client – prostitute.

Specific Objetives:

To analize the perceptions that prostitutes and clients have about themselves.

To describe the situation of vulnerability that prostitutes find themselves in Paraná.

Methodology:

The interpretation of reality will be dealt with by means of interviews to prostitutes and clients.

My disposition to participate in this Convention has the aim of making the results of this research, carried out at the National University of Entre Ríos, known to colleages of other parts of the world.

I have previously attended the International Conventions of Barcelona and Río de Janeiro.

TuW12: 2 Sexual Networking by Adolescent Girls at Oil Locations in Nigeria: Implications for Women in the Times of Aids

Faleyimu Bode-Law

Cares- Center For Adolescent Research Education And Sexuality,

Warri. Nigeria

Issue: STDs including HIV/AIDS affect both man and woman, but it's physiological effects and social consequences and other gender-related abuse, are particularly more severe for women especially those in the developing world. Social norms for sexual and marital behavior put women at risk of acquiring STDs. Early coital debut, polygyny and socially condoned male promiscuity all increase the risk of acquiring infection. The Nigerian adolescents lack proper reproductive health information, are faced with negative peer pressure and are often subjects of sexual violence.

Traditional gender role behavior makes women to lack economic opportunities and sex becomes an important economic commodity. This survival strategy is one of the factors responsible for increase in sexual networking as the nation's economy takes a decreasing trend luring more adolescent girls into commercial sexual networking for survival.

Adolescent Commercial Sex Workers (ACSWs), community girls and settlers at oil location are more vulnerable to HIV/AIDS in the face of sexual network with Field-Based Oil Workers (FBOW) at oil locations. This interaction which are both focus and diffuse results in immeasurable social, economic psychological and medical consequences for women.

Field-Based Oil Workers in the Oil and Gas Exploration and Production sector have a stable income, have poor access to health information and extremely mobile; spending long periods away from their usual partner and are therefore exposed to high-risk sexual behavior.

Recent evidence tends to classify them into high-risk group like truck drivers, tourists, CSWs intravenous drug users and itinerant traders. The implication of this for sexual network contacts in the urban community where they reside can just be left unimagined.

Project: A pre-program Key informant interviews and Focus group discussion amongst ACSW and FBOW at Oil Locations revealed poor awareness, misconceptions and doubts about HIV/AIDS. There was a high level of sexual networking (focus and diffuse), multi-partnered sex with its attended multi-agents STDs. Condom use was low (14 %) and most have a poor risk perception.

Seventy-eight percent of CSWs were adolescents and young single mothers; 46% were students of higher institutions and 13% of ACSWs were community youths.. Majorities were professionals and immigrants with the "locals" forming a minority. They migrate by following the oil rigs, alternates by "crew changing" and use boats, canoes and motorcycles for transportation. Some of the ACSWs at the focus group discussion identified poverty, peer pressure, polygamy, teenage pregnancy, and highly mobile clients amongst factors that facilitate sexual net working at Oil locations. The misconception that adolescent girl is "fresh", more seductive and less likely to be infected with the HIV virus seems to be the single motivator for the FBOW's preference for ACSWs at the Oil locations in Nigeria.

TuW12: 3 Motivation, Sexual Behaviour and Working Conditions for Women/Girls in the Informal Sector

Alice Nyirenda

ICOH - PPAZ - International Planned Parenthood Federation (IPPF)

Aims

The aims of the research were to explore the sexual behaviour and working conditions for women/girls in the informal sector and to explain the difficulties that these women and girls experience. Drawing on these experiences to explore how they regulate their own sex life and work in the informal sector, the study's main focus was on the commercial sex workers.

Methods

Interviews were held with women and girls selling at the market place and on the streets of Lusaka City. Reformed commercial sex workers at the rehabilitation centre - Tasintha were also interviewed.

Review of records on cases of STD and related diseases at the Centre's Clinic for the years 1997 to-date.

Review of data of the Planned Parenthood Association of Zambia (PPAZ) project for young women (mainly sex workers) along the TAZARA corridors. Age range was 9-35 years.

Results

Results showed that women and girls in the Informal Sector go through a lot of hardships, spending most of their day and night at work, under trying, difficulty and non-conducive environment. The women wake up as early as 04.00 hours in the morning and go to sleep late at 23.30 hours every day.

For sex workers, the job is risky and not safe. Most of the girls interviewed stated that they were subjected to risky situations such as having unprotected sex, being beaten and sometimes dumped at the graveyard in the middle of the night. They also were always on the lookout for the police, who would arrest them and subject them to humiliation and abuse.

Conclusion

In the Informal Sector, the women/girls work under difficulty conditions where there are no laws and regulations to govern their operations. The occupational health and safety services for the women in this sector are none existent. The PPAZ project and the rehabilitation centre offer services to the commercial sex workers so that they can reform, become self-reliant, be economically empowered and consequently stop the trade.

TuW12: 4 To Study and Monitor HIV Prevalence among CSW of Low Economic Group

Jyotsna Shrestha
SACTS (STDs & HIV/AIDS Counselling & Training Services), Nepal

Project: Blood samples were collected from street girls working as CSW, whose clients ere mostly mobile population and labours of low-income groups.

900 blood samples were collected and tested as unlinked anonymous. For participation in this study, the CSWs were paid a nominal fee equivalent to payment done by one or two clients.

Every year from 1996 to 1998 three hundred blood samples were taken for HIV screening. *Result:* Out of three hundred blood samples tested annually, 8 were positive in year one, 26 in year two and 48 in year three. The prevalence of rate increased from 2.7% to 16% in three years time period.

Lessons learned. The HIV is spreading rapidly among CSWs of whose clients are low-income groups. More CSW are coming in contact with HIV positive clients. And this in turn will pass to more uninfected clients who in turn will carry and transmit to their spouse. So a strong intervention program of safer sexual practice is needed for CSWs.

TuW12: 5 Effects on Health from Commercial Sex Work

R George, S Delany, H Rees Reproductive Health Research Unit, University of the Witwatersrand

Introduction

Against the backdrop of South Africa's Constitution and Bill of Rights, the continued criminalisation of sex work, denies the right of sex workers to enter freely into the occupation of sex work, and fails to recognise sex work as a form of work. This is turn, denies sex workers the right to fair labour practices, and provides no recourse to legislative mechanisms to secure such rights such as the right to occupational health and safety. New approaches, which acknowledge and respond to the health and safety risks associated with sex work, are important, particularly if South Africa is to respond effectively to the HIV epidemic.

Methods

A pilot programme to provide brothel-based services for the treatment and prevention of sexually transmitted infections in 12 hotels in Johannesburg was started in June 2000. Information of risk behaviours, condom use and sexually transmitted infections was collected over a 1-year period. Additional information on the acceptability and feasibility of this approach, as well as the impact of the continued criminalisation on the health and safety of sex workers was also collected.

Results

A total of 3298 women at high risk were seen by the project during the period June 2000 to August 2001. X was treated for sexually transmitted infections. Condoms were distributed over the same period. This approach was found to be acceptable to most sex workers as well as to the management of these hotels. In addition to providing treatment for STIs, the services are seen as a source of information and support for a broad range of occupational health issues. Since the initiation of the project, there has been growing interest on the part of sex workers to organise and give voice to their concerns about the continued impact of the criminalisation of sex work on their health and safety.

Conclusion

In the context of entrenched poverty, gender inequality and a devastating HIV epidemic, programmes that acknowledge and respond to the health and safety risks associated with sex work are essential. Programmes, which have focussed on the control and prevention of HIV, must respond to the broader health and welfare needs of sex workers as workers if they are to be truly successful.

TuW12: 6 Death, Work and Sex in the Line

Dina Susana Mazariegos Garcia ColectivoDe Mujeres Nuestra Voz, (Our voice Women's Collective) Guatmala

Background.

We are a small collective of diverse Guatemalan women, members of the women's movement through coordinating platforms and national lobbying efforts. With our work we want to strengthen the organization and participation of other women and ourselves in the social and political processes of the Country which contribute to changing economic, social, political and cultural problems that face women and society as a whole at the local and national level.

Our Objectives

Promote respect of the Human Rights of sex workers, with the intention of initiating a process of empowerment for them that improves their living conditions and permits them to an integral development as social subjects.

Strengthen the process of organizations which began in the year 2000

Coordinate actions with other organizations of the Women's Movement to participate in the process of transformation of the position, condition and situation of the Guatemalan women. Provide a secure space where sex trade workers ca exchange their experiences.

Statement Of The Problem

The general situation in which Guatemalan women live is seen to be particularly accentuated for sex trade workers who have always been marginalized from political participation.

The problem which sex trade workers suffer daily is the violation of their elemental rights as human beings and workers, such as: the exploitation by owners of nigh clubs, closed houses, bars and show bars; the abuse by public forces such as the National Civil Police who detain women, in many cases without any reason, and in frequent abuses of force take physical and sexual advantage of them; the conditions of the places where they work are sub-human, consisting of a one and a half square metre cubicle with just a bed and no sanitary services for which they have to pay two-thirds of their income to rent; the mafias have the Linc territory divided such that women working in any area literary belong ton one band or another to whom they must pay a work tax; in addition to all this must be included the permanent rejection by society at large, where all people want to abuse them, the law marginalizes them; the majority are single mothers, who in order to maintain their children are forced to lead double lives to hide the truth of their work, emotionally affecting those children they are trying to protect; the resulting levels of stress, compounded by working without security or hygiene, hiding their identity and under the constant pressure of gangs understandably cause anxiety problems. To address these difficulties, many women opt for any number of addictions which provoke further serious health and family problems to which we must add the constant risk of contracting HIV-AIDS, especially considering that Guatemala does not have a truly preventive program particularly as it concerns this sector of the population.

Reaction To The Problem

After gaining a deeper understanding of the specific problems of sex trade workers, in 1998 the collective decided to work directly with sex trade workers in order to strengthen their individual and collective political capacity.

2002 will be the beginning of a process of organization with these women of the line In November of 2001 the first organization for women workers of the sex trade was established in Guatemala, called Mujeres en superación.

Reaction To The Problem (2)

Mujeres en superación are member of different coordinating bodies for he women's movement. As an organization of women they have begun discussions with instances of government to reduce the violence and death that they suffer daily.

They are accepted in different women's spaces as active members and part of the womens movement.

Activities

To realize our work goals we engage in the following activities:

Integrated Training School

Methodological Training School

Actions for community and organizational strengthening

Promotion of Technical Training

Political participation in areas of incidence of the women's movement and other social movements Institutional Strengthening

Lesson Learned

Through this experience we have shown again that the organization of women is important to reduce levels of discrimination and violence that Sex Trade Workers suffer both in their work and outside of it.

The organizational strengthening of Mujeres en Superación is paramount to monitoring the organizational process.

Technical training should encourage Sex Trade Workers to be capable maintaining and making self-sustaining their organization.

Integrated health services for Sex Trade Workers are of prime importance.

Lesson Learned (2)

That Sex Trade Workers have the right to their own organization to propose the resolution of their own problems.

They are sensitizing some sectors that Sex Trade Workers on the Line have the right to work in humane conditions.

Lesson Learned (3)

That the participation of Sex Trade Workers is fundamental in the development of their organization.

That the organization of Sex Trade Workers are part of the Guatemalan women's movement and necessarily must articulate their forces to achieve their objectives.

TuW13:Domestic Violence

TuW13:1 A sustainable way out of violence against women

Maria Nyhan/Peter Herrmann European Social, Organisational and Science Consultancy (ESOSC) The Jasnaja Poljana Clonmoyle, Aghabullogue, County Cork, Ireland

For more than two decades feminist research and writing has shown how the conditions of women's lives affect their health. In most societies, men are usually dominant in the allocation of scarce resources and this structured inequality has a major impact on women's health. Clearly a focus on women's health demands an examination of aspects of their lives that make them vulnerable to illness. In this paper we highlight three particular dimensions of women's lives which in general terms, threaten women's health:

- Male violence, particularly in intimate relationships
- In a seemingly "milder" version of such violence, i.e. psychological abuse
- Working conditions, which are particular for women
 These threats are of course covering an extremely wide array and touch different scales, being the expression and form of mainly
- General "minorisation" and incapacitation
- Social, i.e. class suppression and/or
- Gendered oppression and dependence

As different as they are – regarding their causes and consequences – the reason for lining them up under the one heading of health threats is to make clear that the basic challenge is not to overcome seemingly individual excesses of violence – replacing one form of threat against another. Rather the challenge is to develop a sustainable way out of suppressive living conditions in general and build up sustainable settings of non-violent, thus non-health-threatening living conditions.

This background has to be even widened for our particular study since we are in our project concerned with what we might call the preliminary stage of health threatening conditions for women's life as the venture focuses on girls and female youth under disadvantaged living conditions. In the setting of Hillgrove Outreach project we are concerned to examine and challenge these conditions in the formative stage of early adolescence. Working with young people from a traditionally working class community in Cork City, the project seeks to target 'at risk' young people and enable them to examine and understand the structures which affect their life situations and serve to disadvantage them in their life chances. The project work consists of the following elements:

- Building up self-esteem by actively "identifying" with and tackling the disadvantage and violating conditions.
- Reconciling "private occurrences" of violence and abuse with the social conditions of the particular social setting and as well with the wider context of contemporary Irish society.
- Integration into socially meaningful activities. Employment is of course especially important. However, it is important to acknowledge the different forms and meanings of activity:
- Employment as means-providing and social activity.
- community activities, volunteering et altera as socially meaningful activities on their own or as preliminary stage of later integration into the labour market

• as far as (young) women in their "own" family setting1 are concerned "private work" has to be socialised and brought to the fore as socially meaningful act.

The presentation and analysis of the work of the project – and possibly a view on comparative projects in other member states of the EU – will give the opportunity to develop general strategies of empowerment as overcoming threatening conditions in regard of health. Moreover, it will be possible to allow for the development of a holisitic community based approach to overcome disadvantage of women.

TuW13:2 Effects of Domestic Violence on the Workingwomen

Meera Jayaswal

ASRA, Association for Social Research and Action Jharkhand, India

Domestic Violence Questionnaire (DVQ) was administrated on 200 married working women, age range 15-45, to screen out women exposed to various degrees of domestic violence-Physical abuse, psychological abuse and economic abuse.

On the basis of score on DVQ, nine groups were formed-three in each of the high exposed, medium exposed the low exposed to domestic violence. On the selected groups, participatory methods-Focused group discussion, Criteria scoring, Matrices scoring, Seasonal calendar was used to estimate the impact of domestic violence on the work output outside home, efforts for career enhancement, mental health, aspiration, optimism and interpersonal relationship with family members, neighbourers and co-workers.

Results showed that the higher the exposure to domestic violence, higher was absenteeism, lesser or no effort for career enhancement, negative mental health, more pessimism and fatalistic and insecurity in interpersonal relationship. The women suggested an urgent need to combat the domestic violence for which a leadership to boost their self-esteem will be very useful. This will not only make the women assertive but also combat the social evil of domestic violence.

TuW13:3 Domestic violence of working and nonworking women and opportunity for women's health protection

Dr. Valentina V. Bodrova, Russian Center for Public Opinion and Market Research Dr. Patricia H. David, John Snow, Inc.

Background and purpose of the research:

The focus of Women and Infant Health Project (WIN) interventions is on maternal and newborn. The 2000 Women and Infant Health Survey included a model that asked women about both their lifetime and previous year's experience of being subject to violence or threats of violence by her partner.

¹ Le. not living as "dependents" in their parents' homes or in any kind of institutionalised setting.

Data and methods which were used:

From mid-December, 1999 through March of 2000 the Women and Infant Health Survey as a component of the evaluation designed for the Women and Infant Health Project (WIN) was carried out in three cites (Velikiy Novgorod, Perm, Berezniki) in Russia, comprising women of 15-44 years, face to face interviews. Total N=3900; this design was calculated to produce close to the desired sample of 1300 women of reproductive age in each city. The Survey was done with USAID-sponsored. Each woman of reproductive age was randomly selected for interview in a household that contained at least one such woman.

Main results:

We exams women in reproductive age by groups: working and nonworking, because the problem of domestic violence is different for working women and housewife in terms of opportunity to receive health assistance for them: generally speaking, working and non working women has different volume of information about centres where women can obtain assistance if they are victims of domestic abuse. Than all types of violence were divided into four groups, from a mere threat to hit or physical abuse of different gravity to threat with a knife and other weapon. Answer given by the respondents of the three cities made it possible to reveal two trends. The first one is that the more serious the violence as a threat to the health of the women the smaller the share of women suffering from it. The second one is that the older the women the bigger the share of women suffering from violence.

Women with the highest level of education appear to suffer less from such abuse than other women, with between 11% and 14% of women educated beyond secondary school reporting such events, compared to almost a quarter of women with less education.

Divorced, separated and widowed women reported the highest level of abuse, with between 35% and 46% of formerly married women in the three cities reporting such experiences. One can reasonably assume from these data that at least some divorces or separations resulted from the level of violence within the marriage.

Women living in individual apartments are more frequently exposed to different kinds of violence and it is to be taken into account a high level of a most serious kinds of violence committed by men – husband or partner - towards women.

In the last twelve months, in each of these three cities there was an increase in frequency of different types of violence (except of threat with a weapon) both towards working and non-working women as compared with the previous 1 two 3 years.

Presence of children in a family is a factor influencing on the conjugal interrelations and interrelations of partners: as the number of children in a family grows, the frequency of acts of aggression diminishes. In general, in all the three cities, acts of aggression are less frequent in family having two children as compared with a one -child family. Acts of aggression are considerably less frequent in families having three or more children as compared with a one-child family: in Velikiy Novgorod, such kind of violence as the threat with a weapon is almost 5 times less frequent, it is 3 times less frequent in Berezniki and 6 times less frequent in Perm.

All women irrespective of age, marital status or level of education gave the advice to apply to the Police (from 58% in Velikiy Novgorod and Perm to 63% in Berezniki). The older the women, more frequently they mention the Police as the place where to get the protection in case of domestic violence.

Conclusions:

Opportunity for protection of health working women and nonworking are different in terms of domestic violence. It is important to establish and strengthen centres where women can obtain assistance if they are victims of domestic abuse, and to ensure that women's health providers are aware of the problem and know how to handle cases when they encounter victims of domestic abuse.

TuW13:4 Health Workers Attitude towards Women suffering from Domestic Violence

Nguyen Thi Hoai Duc

The Center for Reproductive and Family Health, Hanoi Vietnam

Background of Vietnam.

In Vietnam, women had suffered many injustices under feudal system during thousand years of history. From success of the August 1945 Evolution, Vietnamese women have had a new position. However, Vietnam society was strongly influenced by Feudalism and Confucianism, therefore Vietnamese women suffered from traditional values and norms, especially the ideology "men are important - women are not important". When women get married, she completely depends on and has to accept all the rules of the husband's and so she has not any right or any position. Especially, she may have to suffer from domestic violence. If husband is bad - tempered, rough and bad – corrupt, he may be a drunk or gambler and beat his wife ruthlessly... the wife still accept and stand hardships without reasons. Almost of Vietnamese people don't think of domestic violence as a social problem. They think simply that it only is a problem in sphere of family. Domestic violence even has occurred in families of intelligentsia. The leaders of community always don't intervene in domestic violence cases, because they think it isn't their responsibility.

It is obviously realized that the domestic violence results to those women who suffered from domestic violence could have both mental and body damages and moreover reproductive health injuries. Most of them could not or afraid of seeing doctors for treatment or counselling because of being ashamed or unfriendly attitudes of health workers. According to some domestic violence studies in Vietnam there were over 50% of women who suffered from domestic violence having reproductive tract injuries did not come to hospitals for treatment. They kept their own sorrows for a long time, thus, the consequences of having reproductive tract infection and long lasting injuries must be happened. And that they are unable to work. This issue must be paid attention to and solved but the burning question is that who will be responsible.

Our study on Health Workers Attitude towards Women suffering from Domestic Violence in Hanoi and Ninh Binh

Methodology, Qualitative methods

- 1. Focus group discussion: We made 16 FGDs on health workers at commune level, 8 FGDs community people to find out the causes, their attitude toward on violence against women.
- 2. In depth interview: We interview victims to know more detail.
- 3. Observation: During doing FGDs and depth interviews we observe their attitude, they pay attention to our topic or not; they tell trust or not. So, we can also measure their attitude.

Major Findings

- 1. Causes of violence against women: In Vietnam, there is back ward thinking that "Man is important and women are not important". Therefore, men always think that they have more right than women have. So, violence against women sometimes and in somewhere is permitted by society, community people including men and women. Some victims said "My husband drinks so much and when coming back home he always beat me without any reasons."
- 2. Factors making violence silently acceptable to women: for many reasons: traditional ideology-backed gender inequality is deeply engraved in their conscience, they feel embarrassed with outsiders, and there is not enough support from society and authorities. It is the wife's acceptable and tolerances that make the cycle of violence (honeymoon tension violence repentance) continue and repeat it. Women think that they have to keep suffering patiently in order to protect the family's prestige, and not seek outside assistance. Therefore, violence is largely still a hidden problem.

3. Attitudes of health workers

Health workers are the first people female victims would meet if they have an injury. Health workers explained that some victims do not go to health services because their injury are not serious, they do not want to carry on their living after they have been beaten, they are afraid being beaten further and their sad stories will spread out, or because they are very poor and they have not got enough money to pay for treatment. Some women do go to the health services, particularly if their wounds are very serious such as broken arm, head and abdominal injuries and if they want to ask for help.

Health workers said they were unprejudiced when they saw victims of violence against women as patients. However, health centers at communes level often lack of drugs costing less than 3000 VND per examination (approximately ¼ of US\$).

4. Attitude of neighbors, community people and local authorities: There is a conciliation team in each community. But these teams act when serious violence occurs on family or society but these actions are not timely. Furthermore, conciliators usually give victims advice such as to bear a stream of abuse, to resign their fate and to conserve their family in every case. Therefore, women who are victims of violence especially domestic violence have to accept to live with their brutal husband without any laments. Local authorities avoid to discussing violence against women in their communes or give very vague recommendations so they are not effective sources for help for abused women.

Because considering domestic violence as a private affair of the family, community people and neighbors dare not protect female - victims. Even both community people and husbands think, "my house is my castle", so, there is not enough support from society and authorities.

- 5. Violence against women affects not only the victim's emotional and physical health but also have devastating effects on reproductive health. But health workers don't consider these victims as patients. Some health workers said "it (violence against women) is a private issue, they have to solve themselves"
 - 6. Consequences of violence against women to family labour force.

Domestic violence against women has become a critical situation under various forms of abuse. The precarious consequences are that the women's health and mental state is in recession after being beaten and insulted. This affects considerably to the women's labour productivity resulting to incomes deterioration and poor living standard.

Currently, women's labour is still the main work force in rural families. The rural women not only take responsibility of doing housework, taking care of husbands and children but also engaged

in farming such as plough, livestock raising, or even being petty trader and hired labour ... Many women are beaten so painful that have to stop working; "the most painful case is hit by the shoulder pole on waist-band perfidiously and I have to stopped working in two weeks..." (Ms. Hoang thi Cu, 36 years old in Yen Quang – Nho Quan – Ninh Binh province).

All the forms of insulting women in families make them wear our, panic, having no peace of mind to work and thinking of escaping from home for few days for security. This situation lasts for years and makes the domestic economy insecure, uncertain and family function upset.

Conclusion

Violence against women is a serious problem and female victims are very miserable. Women have to deal with the situation alone as no organizations speak out in defense of female victims. They are the very poor people in the community because of poor health condition and losing labour force. Traditional culture and gender inequalities are the main causes of violence against women. Help from health workers is insufficient. They provide these victims with an equivalent health service to others and health workers still think "a man is important and the woman is not important".

Recommendations

Policy makers should need to pass laws to prevent and criminalize violence against women and domestic violence. Government should have positive policies to help female victims. Education on human rights, reproductive rights and gender equality is needed for authorities, both men and women. Diverse forms of IEC (information, education and communication) programs and activities are needed. In order to help female victims effectively, an intervention should be established, with health centers are supported financially and having essential drugs and health workers trained in counseling skills and on issues of gender. A24 hour shelter may also be needed.

TuW13:5 Effects from domestic violence on women's possibilities of working

Denise Caroline Mwanza
Self/Seventh Day Adventist Church

The researcher finds a dual meaning to the above subject as explained below. Firstly, the impression got is that the "Effects from domestic violence affects the possibilities of women to work, while the second impression is that Effects from domestic violence reduce the possibilities of future job seekers to be employed". The researcher therefore discusses the paper from both angles.

The researcher attached herself to the Young Women Christian Association (YWCA), a Drop-in Center and to the ministry of Home Affairs, both institutions being tenable in Lusaka City.

Aims: To explore the extent of the effects of domestic violence on the possibilities of women already working and those intending to work. On these bases, also to determine the effect of this violence on the job performance or productivity of the already workingwomen and to determine the impact of the violence on the future women job seekers. Lastly, to study the health conditions of the two groups in their respective areas.

Methods: interviewing, data collection, literature review, use of available records and discussions with the senior staff of both the YWCA and Home Affairs.

Results: at the YWCA it was revealed that mainly as a Drop-In Center dealt with cases like Property Grabbing (231), Domestic Violence (35), Matrimonial Problems (74), Family Problems and Child Support (128). All cases were for the year 2000 - new ones are yet to be compiled. At the ministry of Home Affairs - under the Victim Support Unit wing 321 cases were recorded, 84

referred to the courts with 9 convictions. Cases for the year 2001 were not yet compiled during my research.

Conclusion: there is great need to economically empower the women for obvious reasons whether in formal or informal employment. Under Victim Support Unit (VSU) it was revealed that domestic violence stemmed from spouses suspecting each other of being HIV/AIDS infected, the woman was eventually the victim. Also money issues especially at month ends, caused domestic violence, man's relatives contributed in various ways as well. The victims eventually lost self-esteem due to domestic violence not only at the office but also in the community they live.

A battered woman is not expected to be in good health - and be expected to be efficient, productive at work and be able to look after her family well at home.

Recommendation: Introduce training in simple skills for the lowly educated woman for self-economic empowerment.

TuW13:6 Gender differences in self-rated health following domestic violence in Denmark

Vanita Sundaram, Karin Helweg-Larsen & Bjarne Laursen National Institute of Public Health, Denmark.

Greenlandish population studies conducted in 1993/1994 are the first of their kind amongst the Nordic countries, to include questions on experienced violence and sexual abuse. The same 6 questions have been included in the population-based Danish National Health Survey (2000) and in a regional Norwegian study (Oslo) in 2001. The 6 questions are also to be implemented in the Finnish National Health Survey in 2002. Thus, comparison of results between the Nordic countries is facilitated.

The Danish National Health Survey (2000) was conducted as face-to-face interviews amongst a nationally and regionally representative sample of 20.000 adults, aged 16 years or above. A response rate of 74.9% was achieved. A self-administered questionnaire was presented to 2/3 of the sample upon interview. Questions on experienced violence and sexual abuse were included in the self-administered questionnaire to be completed by the respondent following the face-to-face interview, and then to be returned by post. The questions on experienced violence and abuse were included in three rounds totalling 12, 779 adults in Denmark. The response rate for the self-administered questionnaire for men (n=6234) was 83 percent, and for women (n=6545), 87 percent.

Valuable information on the consequences of violence and sexual abuse on health and quality of life (including ability to work) may be derived from the Danish National Health Survey. Additionally, it is possible to obtain data on the perpetrator of violence and sexual abuse, thus gender differences in the consequences of domestic violence on health may be deduced from this data. Preliminary results reveal that particularly for the age group 15-24 years, more men (28.3%) report experiencing violence during the past 12 months than women (11.0%). However, a significantly greater number of female victims (24.4%) report poor self-rated health compared with male victims (20.2%) and the gender difference is also salient for specific morbidity symptoms such as anxiety and stomach ache.

The results of further and full analysis will be presented.

TuW13:7 Correlations between experienced domestic violence, job affiliation and self-reported health

Karin Helweg-Larsen, Vanita Sundaram & Bjarne Laursen

National Institute of Public Health, Denmark.

The Danish National Health Survey (2000) was conducted as face-to-face interviews amongst a nationally and regionally representative sample of 20.000 adults, aged 16 years or above. A response rate of 74.9% was achieved. A limited number of questions on experienced violence and sexual abuse were included in the self-administered questionnaire to be completed by the respondent following the face-to-face interview, and then to be returned by post. The questions on experienced violence and abuse were included in three rounds totalling 12, 779 adults in Denmark. The response rate for the self-administered questionnaire for men (n=6234) was 83 percent, and for women (n=6545), 87 percent.

The Danish National health surveys are performed repeatedly with an interval of 5 years. They contain a core of data on demography, socio-economics, including primary and vocational education, job-affiliation and job position, health behaviour, self-rated health, use of the health care system and alternative treatment, and environmental factors. Apart from questions about violence and sexual abuse, the self-administered questionnaire in 2000 included information about suicide attempts and thoughts, sexuality and accidents.

Information about violence and sexual abuse covers data on perpetrator, which make it possible to define partner or domestic violence. Preliminary results reveal that particularly for the age group 15-24 years, more men (28.3%) report experiencing violence during the past 12 months than women (11.0%), however the percentage of domestic violence is significantly higher among violated women than men. There exist significant gender differences in correlations between domestic violence, health and socio-economic status. The paper presents result based upon logistic regression analyses that include a number of possible confounders to the observed correlations between work, violence and health.

TuW14: Occupational Health and Safety, Working Conditions and Environment

TuW14: 1 Health keepers violence perception, within a primary health care work context, from a gender perspective

Tatiana Paravic; Sandra Valenzuela,; Olivia Sanhueza Universidad De Concepcion, Facultad De Medicina, Departamento De Enfermeria, Chile

Health personnel in Chile is a group mainly conformed by women, reaching up 70% of this population where a great proportion of them are serving the lowest positions at the functional hierarchy, adding to this: double shift, the unworthiness of the feminine work and the fact that are socialized to serve others.

Adding up all this factors, besides the caretaker - user interactions and the power structures, they all contribute to the violence rousing over the health care environments.

So, this research looked for the identification of the group of employees with most risk, the agents that were most frequently aggressive and the reasons they had to exert violence. It also was interesting to get to know the violence types and the consequences either at physical health level or mental health level, analyzing the data with a gender perspective.

The researchers considered the universe of the different categories of employees within a primary health care center belonging to a rural and urban southern community of the country (CHILE).

Data collection was worked out with a questionnaire built by the authors and validated by an expert panel and focus group, as well. This procedure allowed picking up the data to meet the planned goals

The results led to a diagnostic upon the perception that the primary health care employees have concerning violence situation at the work context, recognizing that the health system user and the family member that is accompanying them are the most frequent aggressors. As for hierarchy, the lowest categories are being served by women; they are the ones who perceived to be the most frequently bothered by men and women from powered positions at the same institutions.

Workwomen from the health system associated the evidence of physical and mental symptom and signals to the violence phenomenon perceived on their respective working environments.

TuW14: 2 Balinese Women, Their Domestic And Occupational Working Conditions And Environment

Adnyana Manuaba r

School of Medicine University of Udayana Denpagar Indonesia

Bali is a small island (5.600 km² in size) with 3 million population, more than a half are women. As they are mostly Hindus in religion, Balinese women beside doing their daily domestic work have also to do daily offering tasks which are very often very fatiguing.

And the number and variation of ergonomics and OHS domestic works problems are depended mostly upon the technology being used which is finally influenced by the economic level condition and lifestyle of the family.

Recently due to higher economic demand, both husband and wife have to work to fill in the family growing needs. Traditionally due to their poor inheritance status in the family, Balinese women always look for a chance to get a job outside the house, in order to feel more free, although the compensation salary is very often unbelievable low.

In terms of occupation, Balinese women traditionally have taken only work opportunities given to them, now in fact we can see women in every establishment, which in the old days was considered taboo. In this context women are practically exposed to the same hazards as men are, also the health and safety consequences. The only difference is that they got maternal leave for three month and menstruation leave for 3 days in addition to what male workers have. Due to this, although it is really in contrary with human rights principles, a lot of enterprises by purpose do not accept women as their workers or make an agreement in advance that if the women get pregnant they must leave the job voluntarily.

In most home industry and cottages, which have become the backbone of small scale industry in Bali, the living and work conditions and environment as well are practically the same, which is really a very bad condition for the whole family especially for the growing children.

Of course a lot of measures have been taken to face all those hazards ever since, but since so many complex constraints and obstacles still have to be faced, a more comprehensive planned program should be made for better quality of life in the near future.

Keywords: Balinese women, domestic, culture, occupation, hazards

TuW14: 3 Hand Eczema in Female Hairdressers

B Meding and M-L Lind; Occupational Dermatology, National Institute for Working Life, Stockholm

M Albin, K Kronholm Diab, Z Mikoczy, J Nielsen and L Rylander; Occupational and Environmental Medicine, Lund University

J Brisman, L Lilienberg and K Torén; Occupational Medicine, Göteborg University, Sweden

Background: Hand eczema accounts for an estimated 90 per cent of occupational skin disease. In Sweden about 10 per cent of the population of working ages have hand eczema sometimes during a year. Twice as many women as men suffer from hand eczema, mainly due to more frequent

exposure to water and detergents, at work and at home. Hairdressing is a female dominated occupation with extensive exposure to skin irritants and contact allergens.

Aims: To estimate the occurrence of hand eczema in female hairdressers.

Method and subjects: A postal questionnaire was sent to 7203 female hairdressers, who graduated from trade schools in Sweden in 1970–1995, and to 7355 female control persons from the general population, matched by year of birth. After two reminders a response rate of 56% in hairdressers and 67% in controls was obtained. The mean age of the responders was 31 years (range 19-50) for hairdressers and 32 years (range 18-50) for population controls. A drop out analysis was performed by telephone interviews.

Results: Self-reported 1-year prevalence of hand eczema was 17.9% in hairdressers and 12.1% in the control group (p<0.001). The incidence rate of hand eczema was 23.8 cases/1000 person years for active hairdressers and 9.9 cases/1000 person years for the population controls, RR 2.4 (95% CI 2.1-2.7). In hairdressers younger than 25 years the incidence rate of hand eczema was 37.1 cases/1000 person years. Change of job due to hand eczema, was reported by 6.2% of the hairdressers and 1.9% of the control persons (p<0.001). The drop out analysis did not reveal any difference regarding prevalence of hand eczema between responders and non-responders to the questionnaire.

Conclusions: An increased risk of hand eczema was found in female hairdressers, when comparing with females from the general population. The incidence was highest among the youngest hairdressers. To avoid considerable consequences for the individual and for society, e. g. change of occupation, the development of preventive strategies is important.

TuW14: 4 Working Environment and Occupational Skin Diseases of the Women Worker in some Textile Mills in Vietnam.

Khuc - Xuyen

National Instite of Occupational and Environmental Health, Ha Noi, Vietnam

Aim: The study was carried out to evaluate the association between working environment and women worker's health especially the occupational dermatosis of women worker in spinning-knitting factories.

Methods: The study-included workplaces monitoring, detection of current diseases and especially occupational dermatosis in addition to paraclinic test. These were carried out in 2914 subjects directly and 730 subjects indirectly exposed to cotton dust at spinning - knitting companies and the cross- sectional study method was used.

Results: The obtained results showed that the working environment was unsatisfactory the air velocity was lower than hygienic standard by 2-6 times, the concentration of cotton dust higher than 33 times M.A.C . The rate of arthragia was 8.4%, otorhilaryn- gological diseases was 89.20% and conjunctivitis was 24.8%, especially work-related diseases such as melanosis was 5.79% and allergic dermatosis of the directly group was higher than 6. 6 times indirectly exposed to cotton dust group and the difference between rates of diseases was statistically significant.

$$(P < 0.001 . OR = 6.6, X2 = 132.25; 4.35 < OR < 9.68).$$

Conclusions:

- The working environment was inconvenient in most textile mills.
- The rate of allergic skin diseases was high in women worker directly exposed to cotton dust and in control group the rate was lower.

• The exposure to cotton dust was an adverse impact on women workers' health and give rise to the occupational dermatosis in textile mills.

TuW14: 6 Environmental and Occupational Risk Factors and the Health of Women in Italy: Historical Review and Emerging Trends.

Irene Figa'-Talamanca University of Rome "La Sapienza"

The paper will first examine the historical trends of women's' workforce participation in Italy in the last few decades, along with the changes in the social policies aimed at the protection of women's' health. The labour force participation of women in Italy is lower than the rest of the industrialized countries, while women (especially in the younger age groups) are presently over-represented among the unemployed. The present day health status of Italian women will be illustrated with the mortality and morbidity data, to highlight the specific health and prevention problems of women in the workforce, and among those working at home and in unstable and atypical work conditions.

The second part of the presentation will discuss the emerging problems: the extreme reduction of fertility and family size in Italy, the lack of sufficient social and societal support for the working mothers, creating the visible and invisible risk factors for women's health. Of particular concern is the ever-growing number of smokers especially among the younger women workers, and the resulting dramatic recent increase in cancer of the respiratory tract. Additional problems concern the health of women in "atypical" work settings, and the special health problems of immigrant women workers.

TuW15: Work and Family Balance in Different Groups

TuW15:1 Micro-Credit, Women and their Workload and Wellbeing: Rural Women's Perspective in Bangladesh

Ware Newaz University of Tampere, Finland

In developing countries, prior to the introduction of micro-credit programs by NGOs, rural women's role was mostly restricted to their domestic work and to unpaid supporting roles in family income ventures. Access to credit, particularly in Bangladesh, has opened up an avenue for the rural women to engage in income generating activities and to enhance their family income. On the other hand, as many critiques of micro credit suggest, it has increased rural women's workload and responsibility to an immense proportion.

Now the women, rural women in particular, occupy two crucial roles – productive and reproductive. The combination constitutes a double workday and a double set of responsibilities. The majority of all women of reproductive ages all over the world face the need to combine economic productive work and childbearing and caring roles. The dual responsibility falls heaviest on low-income women in developing countries like Bangladesh whose economic contribution is increasingly vital for the survival of the family.

The above conclusion however has been reached in academic discourse mainly from western feminist perspectives. In most studies on micro-credit, rural women and their work, the views and perceptions about the workload and workday of the concerned rural women have been ignored. Thus a major research vacuum is evident.

This paper', based on empirical study, a blend of PRA, PRA and observations, conducted on 40 rural women (credit group members) in two different districts in Bangladesh. This paper deals with the women's perceptions of their changed work position and increased workload ever since they have taken credits and it also deals with its (present workload) bearing on their personal and family wellbeing. The general findings of the study conform to the popular observation that the access to credit has overburdened rural women both at home and at work. However, the paper also shows how the rural women deal with such workload with a positive note and trade off such phenomena (double work day and workload with family wellbeing and their own enhanced dignity in relations both at home and society. Women's perspective on their work and workload and its impact on their relations at different levels at home and society may provide a significant input in understanding the dynamics of women work, both for scholars and practitioners dealing with women empowerment and gender relations.

TuW15:2 Balancing Work and Family Life: Experiences by Nepalese Women at UMN

Jiwan S. Acharya United Mission to Nepal (UMN)

United Mission to Nepal (UMN) was set up in 1954 to serve the poor and marginalized people of Nepal in the areas of health services, education, rural development and engineering and industrial development works in Nepal. At present, there are 1085 Nepalese working at UMN and out of them, 487 (43%) are women working in various levels. Female employees have been increased by 4.25% compared to last year. This figure is quite impressive in a country like Nepal where for instance only 5.3% are female in the 3rd class gazetted officers in the government in 1997.

Traditionally, Nepalese women live at home and do household work whereas men's job is to earn money for family. Time has been changed and number of working women is increasing quite significantly. However, workload for working women at home has not been changed notably and increase in sharing of household work with other members of the family is of great challenge. In this setting, it is very important to find out how women are balancing their work and family lives and the type of response they are receiving from their families. To put more lights on this, a simple survey and interview has been conducted with female staffs at UMN to find out how is their working situation at UMN, what are the changes in their workload before and after getting job, division of working load at home, psychological stress at home and at work, inequality realized at home and at work, sexual harassment if there are any etc.

Based on these findings, analysis will be presented on strategies and methods that are either being used or can be used in practice to balance work and family life. This paper also presents major issues, possible conflicting areas and possible solutions for women to further augment the work and family life balance. Some unsolved issues, gender inequality, psychological stress and its impact on balancing work and family life, potential backing from organization, impact from other expatriate females to Nepali women at UMN will also be elucidated in the paper. The results from this paper can be shared with other organizations and experiences gained can be of great assistance to all concerned in this aspect.

TuW15:3 Flight attendants talk about work, family and health: generating hypotheses from qualitative research

Terri Ballard, Istituto Superiore di Sanità Laura Corradi, Laura Lauria, Clelia Mazzanti, Federica Sgorbissa, Patrizia Romito, Laboratorio di Epidemiologia e Biostatistica

Civilian flight personnel have been the subjects of many studies investigating cancer risk from exposure to cosmic radiation. However, other exposures and outcomes that may be associated with this type of work have been neglected, such as mental illness or psychosocial disturbances, particularly among women. We are conducting a cross-sectional epidemiological study of female flight attendants to investigate health effects related to work exposures, including psychological conditions. We employed qualitative research methods in order to generate hypotheses for possible work-related sources of psychosocial stressors and to better define the topics to be studied in the survey. From a series of focus groups and long interviews, active and retired female flight

attendants identified concerns that merit further investigation. These concerns include being inadequate mothers due to frequent absences from the family, having limited time to resolve conflicts in their personal lives, having difficulties in maintaining family and social relations, and as a consequence, suffering from loneliness and isolation both at work and outside work. Many of the women spoke of severe episodes of panic attacks, anxiety and depression experienced either personally or by close colleagues. From the information gathered during the focus groups and interviews, we were better able formulate survey questions for studying the association between the work as a flight attendant and psychological outcomes.

TuW15:5 Work, family and stress - differences between female and male physicians

Saara Töyry; University of Kuopio, Department of Public Health and General Practice Markku Äärimaa; Finnish Medical Association Raija Kalimo and Kimmo Räsänen; Finnish Institute of Occupational Health

Background: The proportion of female physicians is increasing in Finland. Almost a half of Finnish physicians are women (48%), and 65% of those under the age of 30 years. With the increasing numbers of female physicians, gender differences will become more important.

Objective: The aim of this study was to obtain information on physicians' stress, burnout and suicidal tendency by gender and family structure, as well as on the compromises which physicians had made between family and work.

Participants and methods: This study was a part of a national survey dealing with working conditions and work strain among Finnish physicians. A questionnaire was mailed to a random sample of the licensed physicians under 66 years of age (n=4477) from the register of the Finnish Medical Association. After one reminder a total of 3313 physicians (74%) responded; 1634 men and 1677 women; the gender of two physicians was unknown. The reasons for stress were asked by the question "What is the greatest cause of stress for you?" including six response alternatives (work, family, combining work and family, health, economic situation, and some other reason as an open-ended alternative). The Maslach Burnout Inventory was used to measure burnout. Suicidal tendency was explored by the question "Have you ever seriously considered or planned suicide?" including four response alternatives (never, considered it, seriously planned it, and attempted it). These alternatives were dichotomised so that "never" meant no suicidal thoughts, and the other alternatives meant that the subjects had at least had suicidal thoughts.

Results: A total of 91% of the male physicians were married or cohabiting and 87% had children. Among the female physicians the percentages were lower, 78% and 73% respectively. Men spent more time in professional practice (46.2 h/wk) than women (42.8 h/wk). Female physicians with children worked fewer professional hours than female physicians without children (41.9 h/wk vs. 44.9 h/wk). The prevalence of suicidal thoughts and burnout (age-adjusted) did not differ significantly between the genders.

Work was the most common reason of stress for both male and female physicians (48% and 47%). Combining work and family, however, caused more stress for women than for men (42% vs. 31%).

Both genders had less burnout and suicidal thoughts if they had children and were married/cohabiting than if not.

Female physicians more often than men said that they had made compromises between family and work, for instance, limited the number of children (22% vs. 8%), had had children at an older age (30% vs. 16%), had reduced continuous education (51% vs. 34%), had worked part time

because of the family (30% vs. 7%), and had given up their jobs because of the husband's need to move to another town (22% vs. 10%).

Comment: Female physicians worked fewer hours in professional practice than men, especially if they had children. Women made more compromises between family and work than men, and women compromised for their family. Combining work and family caused more stress for women than for men. However, the family seemed to "protect" both male and female physicians from burnout and suicide, rather than being a stress factor.

TuW16: Psychosocial Exposure and Labour Market Participation

TuW16:1 Women at the Labour Market

Kristina Kjaer Helgstrand, A Guichard, MV.Groth, National Institute of Occupational Health, Department of Psychology and Sociology, Department of Epidemiology, Copenhagen, Denmark

Background: A longitudinal national survey on work environment and health was conducted at the National Institute of Occupational Health in 1990-2000. The participants were 5940 randomly chosen Danish employees at age 18-49 years in 1990. In the follow-up study in 2000, 79% of the participants from the 1990 survey were included. Results showed that significantly more women (4,7%) compared to men (2,5%) had left the labour market, before the normal retirement age. Hence, the participants were 28-59 years old in 2000. On the basis of these findings, a study with focus on women at the labour market, was initiated by the Ministry of Labour, ongoing from 2001-2004.

Objective: The aim of the study is to prevent the increased frequency of women prematurely leaving the labour market and to identify conditions improving respectively reducing the well-being and work-ability of women.

Methods: Part of the study includes data collection from 17 different female dominated workplaces representing different types of work. The workplaces are making different kinds of interventions to improve women's work life. Results of these interventions are evaluated as part of the study, with focus on the psychosocial work environment. Moreover, data on physical and ergonomic work environment are also included. Also, the balance between work life and family/private life is investigated together with data on education, lifestyle and coping strategies. The Copenhagen Psychosocial Questionnaire and qualitative interviews are used to measure these variables. Data for the baseline study is presently being collected and analysed.

The results from the analysis of gender differences in work environment and health from the longitudinal study will be presented together with experiences from the baseline data from the intervention study.

TuW16:2 The path to long-term sickness absence with Burnout Diagnoses from a layperson perspective

Ulla-Britt Eriksson, Bengt Starrin, Staffan Janson, Kristina Alexanderson Karlstad University and Linköping University

Sickness absence has increased much in Sweden recently, especially among women and with stress-related psychiatric diagnoses (burnout). However, there is little knowledge on these women's view of their situation.

The aim was to analyse the situation of persons long-term sick listed with stress-related psychiatric diagnoses using sociological theories on social bonds and emotions of shame.

Our data is based on semistructured interviews of a sample of 32 persons (88 % women) long-term (longer than 28 days) sickness absent due to burnout or other stress-related psychiatric diagnoses. The data was analysed with a grounded theory approach.

Based on the interviews we have identified a number of critical incidents at the work site in the past history of the sick listed. The first step in this chain of incidents is organisational changes leading to threatened or weakened social bonds (including serious conflicts, tensions, and bullying). The second critical stage appears when these weakened social relations also are followed by vague expectations, diffuse demands, and reduced personnel. The next step appears when the new demands also are in conflict with the sick listed's own views, which leads to emotional strains influencing the trust in others and in themselves. Emotions of shame appear. Since shame is such a painful emotion different strategies are used to hide this, including withdrawal of social contacts and aggressive behaviour. Gradually different physical and mental symptoms begin to show and one day the person collapses and this is the start of a long period of sickness absence. This may eventually lead to a final exclusion from the labour market.

This theoretical model gives a tool for understanding the process behind sickness absence with burnout or other stress-related psychiatric diagnoses. It is not the organisational changes per se that gives these consequences. With the quality of the social relations in focus and given the other mentioned prerequisites this described selective chain emerges from the sick listed's own perspective.

TuW16:3 Tears at work: emotional labour, gender and mental health

Angelo Soares Université du Québec à Montréal

For a long time we believed it was possible to leave our emotions at the threshold of the work organization. Rooted in western culture, this vision sees an opposition between emotion and reason and prescribes the taming or suppression of emotions in the need for efficiency and productivity at work. This Cartesian rationality also manifests itself in several analyses of different types of work, where it is a question of separating the "body" and "soul" of the worker while uncovering each of their gestures and movements. This excessively simplifies the complexity of work and causes an underestimation of the effects of work on health.

As in all other human activity, work sets the stage for the (re)production of different emotions. The emotional dimension certainly introduces complexity in the analysis of work and its relation to physical and mental health. It also provides the possibility of a more accurate and just understanding of work, its organization, and its effects on health.

In this way, the emotional labour debate has changed this simplistic conception of the workplace, by trying to understand how people express and manage their emotions at work. However, it remains surprising that so little had been written in order to explain or understand tears at work, since crying is the most telling expression of intense emotions and is considered the essence of being human. Do men and women cry at work, or because of work? What are the reasons for crying at work? Is there any possible relationship between emotional labour, crying and mental health? These are some of the questions that we will try to address in this paper.

To understand these questions, we used a qualitative approach based on 80 individual interviews with workers in the service sector in Montreal. Using elements of the sociology of emotions and the sociology of work, we will try to answer the questions raised above.

One may identify two forms of tears at work. First, not all work-related crying episodes are related to sadness. Appreciation for a job well done positive feedback, gratitude, or a client that recuperated from a serious illness or childbirth also elicited joy tears. Unfortunately, most work-related episodes are based on sad crying. Five reasons based on interactions, emotions, and working conditions were identified as sources of tears at work.

First, work does not live up to expectations and one is unable to accomplish the work satisfactorily. These situations may involve negative evaluations of the self, and workers feel it to be a personal failure, a direct attack to their selves. Secondly, workers experience tears after an intense episode of stress, such as a supermarket cashier who experiences a hold-up. When stress is intense, chronic, and leads to feelings of helplessness, workers will cry. Third, when workers face injustices at work, anger becomes an impediment to the accomplishment of emotional labour and produces tears at work. One may also cry at work due to social, physical or mental sufferings in the workplace. Finally, different forms of violence at work, from verbal, physical, or mobbing, will illicit tears in the workplace. Crying at work is related to an overload of emotional labour and to the impossibility of its achievement. Then, differences between male and female crying, at least at work, may be explained not only by a gendered socialization of individuals, but by the sexual division of emotional labour which imposes an emotional overload on women, since more intensive management of emotions is demanded of them at work.

TuW16:4 Psychosocial resources among women and men in high and low socioeconomic groups

Elaine Sjögren, Margareta Kristenson and The LinQuest Group The Centre for Public Health Sciences, Linköping

Introduction: Low socio-economic status is strongly related to poor health development and risk of disease. This effect cannot be explained entirely by traditional risk factors or lifestyle. Several prospective studies have showed that the availability of psychosocial resources, such as social network, coping ability (i. e. mastery) and hope, promote health and protect against disease. It is now a well-established fact that self-rated health is a very strong predictor of mortality. Central to good self-rated health is an individual state of mastery and psychosocial balance, while poor self-rated health corresponds to a state of psychosocial imbalance (stress). The aim of this study is to describe the relations between self-rated health and a range of psychosocial measures, and to compare the prevalence of psychosocial resources among women and men in high and low socio-economic groups.

Methods: In 1999, the cross-sectional Public Health Survey in the County of Östergötland, Sweden, examined 6 500 women and men aged 20-74. Among other characteristics socio-economic status, self-rated health, social integration, coping ability (mastery) and hopelessness were monitored. In a sub-sample of 400 men and 400 women, aged 30-65, measures of vital exhaustion, self-esteem, social support, cynicism and depression were included.

Results: Compared with women with poor self-rated health, women with good self-rated health obtained higher scale scores on social support, social integration, coping ability, self-esteem and quality of life, while a lower percentage expressed hopelessness. They also showed lower scale scores on vital exhaustion and depression. Among men, the same differences were found, apart from no significant difference for social integration.

Compared to men, women obtained lower scale scores on coping ability, self-esteem, quality of life, and a higher percentage expressed hopelessness. Women also had higher scale scores on vital

exhaustion, cynicism and depression compared to men. Women with low socio-economic status had lower scale scores on quality of life and cynicism, a larger percentage expressed hopelessness and they had higher scale scores on depression, compared to women with high socio-economic status. Men with low socio-economic status reported less control at work compared to men with high socio-economic status.

Conclusions: Good self-rated health among both women and men is related to the availability of psychosocial resources and a psychosocial balance. Compared to men, women have a lower level of psychosocial resources. Compared to women with high socio-economic status, women with low socio-economic status have fewer psychosocial resources. Poor self-rated health and the lack of psychosocial resources could be one reason why women with low socio-economic status are at a high risk of disease.

TuW16:5 Chronic Fatigue among Bank workers in Brazil

Maria de Fatima Marinho de Souza*, MD, PhD; Karen Messing**, PhD; Paulo Rossi Menezes*, MD, PhD; Hyong Jin Cho, MD*

*Faculty of Medicine - University of Sao Paulo (USP), Brazil; **Centre pour l'Étude des Interactions Biologiques Entre Santé et l'Environnement (CINBIOSE), Université du Québec à Montréal, Canada.

The present study examines the prevalence of chronic fatigue (CF) among bank workers in Brazil, and possible associations of fatigue with gender and working conditions. The study sample included all 735 workers from the department of data processing of a state bank. Chronic fatigue was assessed using the Chalder Fatigue Scale. Socio-demographic, socio-economic, working conditions and psychosocial factors at work were analysed. Psychiatric symptoms were measured with the SRQ-20. The analysis was conducted by logistic regression, stratified by sex.

The estimate of the prevalence of CF was 8.7% overall (95%CI:6.4% to 10.9%), 7.8% (95%CI:5.5% to 10.7%) among men, and 11.0% (95%CI: 6.7% to 16.9%) among women, but the difference was not statistically significant. In univariate analyses, CF was associated with education level, domestic workload, work station and tool ergonomics, and minor psychiatric disorders. Psychosocial factors at work associated with CF were speed/competitiveness at work, repetitive/monotonous work, and dissatisfaction at work.

In the final model, risk factors for CF were high work-speed/competitiveness (OR=3.1), dissatisfaction at work (OR=2.2), minor psychiatric disorders (OR=5.6), medium (OR=2.0) and heavy domestic workload (OR=9.1).

According to these results, chronic fatigue is common among these bank workers, and is associated with psychosocial factors at work. Particularly among women, domestic workload, marital status and the presence of young children were associated with chronic fatigue in the stratified analysis. It is likely that domestic workload adds physical and mental stress, putting employees at risk for CF from overload.

Key Words: chronic fatigue, epidemiology, bank workers, occupational health, gender, female, double workday, domestic work, work organisation.

TuW16:6 Nr 106 The Importance of Horizontal Gender Segregation for Alcohol Problems and Mental Health

Annukka Savikko Göteborgs University, Göteborg

Introduction: Earlier studies have shown higher alcohol consumption and poorer mental health among women working in male dominated occupations. However, contradictory results have been presented. The aim of this study was to analyse the association between gender segregation in Sweden, (a country with highly developed gender equality,) and alcohol consumption, alcohol diagnoses and other psychiatric diagnoses.

Method: This study is part of the Swedish longitudinal, multipurpose study "Women and Alcohol in Göteborg" (WAG), a study based on a stratified general population sample and a clinical sample. Structured baseline interviews were conducted with 406 women in ages 25-66, interviewed 1990; 615 women in ages 20-25, interviewed 1995; and 231 women in ages 23-89, from a clinical sample interviewed 1991. In this study occupation were analyzed in relation to alcohol consumption and mental health. Occupations were classified in accordance with Nordic Occupational Classification. Alcohol consumption was analyzed as high episodic drinking (HED=60 or 72 g alcohol/occasion at least once the last year depending on age group), and high alcohol consumption (HAC=600 g alcohol/month during the last year). Diagnoses on alcohol dependence and/or abuse and other psychiatric diagnoses were made according to DSM.lll-R.

Result: In the analyses we controlled for early background factors (early alcohol debut age, early alcohol intoxication, and psychological or psychiatric problems or deviant behaviour before the age of 18) found in other studies to be predictors of ADA among women. We also controlled for effects of age. We did not find higher risk for HED, HAC or ADA among women working in male dominated occupations. On the contrary, we found a tendency (although not statistically significant) for higher risk for ADA among women working in female dominated occupations. At the moment we are performing analyses with regard to the relationship between gender segregation in occupations and psychiatric diagnoses.

TuW17: Musculoskeletal Disorder and Psychosocial Factors

TuW17: 1 Repetitive work and postural stresses of women in informal sectors of industry

Anjali Nag and P. K. Nag National Institute of Occupational Health, Indian Council of Medical Research, India

Women constitute a significant workforce in the informal sectors of industry in the industrially developing countries. In mass production industries, traditional village and cottage industries, women are engaged in repetitive tasks with high postural load due to constraints of work method and working condition. This contribution elucidates the analysis of work stresses with special reference to working posture in two small industries (i) beedi (indigenous cigarette) making - and (ii) garment industry sewing machine operation. The working conditions of these two occupational groups represent a large number of other industrial situations.

A detailed ergonomic checklist was administered to two hundred and eighty five women, relating to different aspects of work, *e.g.*, mechanistic, biological, environmental, perceptual and motor, technical and psychosocial aspects of work. In addition to postural analysis, objective measurements included electromyography of back muscles of selected volunteers to examine musculo-skeletal stresses and strains in different work postures.

In beedi making activity, women adopt unique floor sitting postures, *e.g.*, legs crossed, one leg crossed and the other leg vertical and bent at knee, sitting with legs extended at knee and sitting sideways with bent knees. Out of ten different postures identified, sitting both legs crossed and legs extended at knee occupy two-third of the total working time. In sewing machine operations women maintain a constant seated position on a workbench with the body inclined forward.

Analysis revealed that nearly two-third of the workers suffered from persistent back pain, which may be attributed to long hours of awkward work postures. The mechanistic and biological aspects of work represented the predominant causes of stresses among these women. *For example,* the operator-sewing machine dimensional and functional incompatibility was a significant stress factor among sewing machine operators. Similarly, in floor sitting beedi-making activities, a workplace intervention was found to be beneficial in improving the postural load and method of work.

TuW17: 2 Work at Video Display Terminal is a Problem

Adriana Todea Institute Of Public Health Bucharest, Romania

This study reveals aspects regarding to medical implications of the work at video display terminal upon redactors from a Publishing House of books.

It is an analytical cohort epidemiological study regarding to the main subjective symptoms of the work at video display terminal: visual strain, chronic general strain, general fatigue, ophthalmologic diseases, musculoskeletal disorders, neuro-psychological troubles, witch may be considered to be related to this activity accomplished by the women.

Study of characteristic symptoms of general and visual fatigue, musculoskeletal troubles was achieved by the training research utilizing the questionnaire; the answers where correlated to objective data from medical documents.

The authors defines some aspects regarding to the work at video display witch through its exigent is a strain one, related to central nervous system and it has implications upon other organs and systems. The principal aspects concern to: general fatigue, visual troubles and ophthalmologic diseases, musculoskeletal disorders, neuro-psychological troubles.

Based on the analysis of the obtained data there where developed ergonomic proposal: office furniture solutions, computer station equipment and suggestions which may help to provide a more comfortable work-environment: support the back, promote comfortable shoulder, arm, wrist, finger and leg postures, minimize eyestrain; medical recommendations need in order to monitoring the state of health. It is a way of making users, managers and occupational health care personnel more aware to human factors to improve the health at the workplace.

TuW17: 3 The difference in Co-variation between Physical and Psychosocial Workplace Exposures in Women of different Age Groups

Kevin F Smith (1,4), L Flowers (2), Margareta Torgen (3), Carina Bildt (3), L Alfredsson (4).

1. Innovative Clinical and Consulting Services and 2 Healthcare Network Solutions, Atlanta,
Georgia USA 3. National Institute for Working Life and 4 Karolinska Institute, Stockholm, Sweden

Introduction: Previous analyses of the REBUS study demonstrated a difference in the strength of the associations between physical and psychosocial exposures and work-related musculoskeletal disorders; based on gender and age group (Smith 1996, Smith 1996). Co-variation between workplace exposures has shown moderate to high correlation based on job category (MacDonald 2001). The aim of this paper is to investigate the relationship between physical and psychosocial exposures in the workplace in women of different age groups.

Method: Subjects: The study group consisted of 252 females taking part in the REBUS II study, a population based on cross-sectional study focusing on the association between musculoskeletal disorders and social, psychosocial and physical factors during work and leisure time (Hultgren 1996). The subjects were grouped by age. Physical Exposure: Twelve physical exposure variables were measured using a self-administered questionnaire. Psychosocial Exposure: Eight psychosocial exposure variables were constructed utilizing an interview-based questionnaire. Statistical Analysis: Exposure variables for psychosocial and physical stressors at work were compared by age groups. Frequencies and percentages were computed for psychosocial stressors and means, and standard deviations were computed for physical stressors. T-tests were used to compare means of physical stressors between are groups. Correlation coefficients were computed within and between psychosocial and physical stressors. A p-value of 0.05 was used to determine statistical significance. All data analyses were performed using SAS software (SAS 2001).

Results: There were no marked differences in frequencies between age groups for psychosocial and physical stressors. There was a stronger correlation between psychosocial stressors in older women, while the correlation was stronger for physical stressors in younger women. Within and between correlations differed by age groups.

Conclusion: There are differences in within and between covariances of psychosocial and physical workplace exposures in women when assessed by age groups.

References:

Hultgren D, et al. Arbetslivsrapport 1996:3.

MacDonald LA, et al. Ergonomics 2001; 44(7), 696-718.

SAS, SAS System for Windows Release 8.02 2001.

Smith KF, et al. Work after 45 – Book of Abstracts, 118-119.

Smith KF, et al. 25th International Congress of Occupational Health – Book of Abstracts 1996:1, 147.

TuW17: 4 Use of qualitative methods to gather exposure information in inaccessible work environments

Mary Anne McDonald, Hester Lipscomb, John Dement, Duke University Durham, USA

Racial, ethnic and gender groups in the U.S. are divided by profound disparities in the risk of chronic disease and injury as well as in occupational safety and health. Underdeveloped areas of the US South have recruited industry, such as poultry processing, through tax breaks, subsidies, anti-union legislation, and the promise of low wages. Historically, employers have sought to reduce labor costs by hiring workers from less advantaged groups, such as women and racial minorities, who are perceived as willing to accept lower pay, poorer work conditions and are less likely to organize. Our academic research group has formed a partnership with a community-based African American women workers' support organisation. Together we are exploring the effects of employment in a modern poultry-processing plant in the rural south where minority women are exposed to fast paced assembly line work. Research outcomes of interest include musculoskeletal disorders (MSDs), acute injury, as well as social consequences of employment.

In light of the poultry industry's historical hostility toward labor concerns, we have designed our study to circumvent the need for their co-operation. We sought to develop methods and tools that would assess traditional exposures (physical, chemical, ergonomic) of women workers' and also work organisation issues.

We conducted individual and small group interviews with 30 workers. The interviews were qualitative in nature and used a topic guide, rather than a script. The guide was designed to collect standard dimensions of ergonomic exposures, such as repetition, posture and force, as well as information about acute injury hazards, work organisation and conditions. Interviews were taped, transcribed, and analysed with N5, a text analysis program commonly used by qualitative researchers. This program allowed us to organise specific information on work exposures, as well as, the themes and common concerns that emerged in the interviews.

This method of cataloguing complex interview data allowed us to document the reality of the women's work in their own words and to create a questionnaire for use in the ongoing longitudinal study of a cohort of volunteers recruited from new hires to the industry. To make the questionnaire more accessible, and culturally appropriate, we were able to use words and phrases directly from the interviews.

Through this initial qualitative work in this multidimensional project, we have been able to collect information that documented the consistency of work demands and conditions among workers in the same job, as well as how worker's introduce potentially very significant variability in their exposures through their own actions. This is particularly salient in the study of exposures relevant to MSDs. In addition, the

process of interviewing workers about their jobs gave researchers a deeper understanding of the work process and built relationships within the community. These methods, even in work environments that are more accessible to researchers, could provide a much richer understanding of work exposures and their variability, as well as the context in which these exposures occur. The process also creates links with the worker community that can be used as an empowerment tool.

TuW17: 5 Information Era needs educated Women in Ergonomics.

Hilja Taal Tallin Technical University Estonia

Background. Employee welfare is one component of the relationship between total productivity and employer's management goals. The awareness of avoiding work related health risks in the computer workplace is a very important factor. The Estonian ordinance is based on 90/270/EEC, and the guidelines are based on European standards EN 29241. This study involved 150 students of the Faculty of Economics and Business Administration of Tallinn Technical University who assessed their own workstations. The participants in the study were 19-24 years old. In our study 63.3% of them were female and of those who work regularly as employees at offices 64.9% were female.

Objective. The study tried to specify the meaning of the phrase "a significant part of the working day" used in the EU directive as well as in the Estonian ordinance of VDU and to find out how the length of the working time with display influences the users' health.

Also the criteria must be viewed as a whole; no individual criterion is either necessary or sufficient for concluding that there is a causal relationship between exposure to a factor and complaint.

Discussion. A checklist is needed to explain the sources of complaints in office work using visual display units (VDU). It is very important to find risk assessment principles for determining really existing risks through probabilities and consequences of so-called risk levels determined in British standard 8800. This is needed for emphasizing working culture and serious attitude to health.

From a macroergonomic point of view the investigation revealed that 82% of students had not been informed about risks arising from working with VDUs. After the course 31.5% of students improved their workplace layout without spending any money. However, suggestions were made involving direct costs for appliances such as palm rest, footrest and chair etc. The number of different complaints rose after one had worked for a longer period. Eye discomfort while working with VDU was experienced by 18% and posture discomfort by 54.7% of the students. According to the number of complaints the respondents fell into groups that were related to the number of hours worked with VDU. The received data were compared with data from persons who used VDU only at home.

Conclusion. In the first place it is useful for students to recognize the source of complaint, type of complaint and specific complaint to provide an analysis from the aspect of visual and posture ergonomics and also from the economic point of view. Moreover, today's students are perhaps future employers who have to guarantee risk assessment on workplaces. On the completion of the ergonomics course, the students should be able to recognize all risks and to take into account also human factors concerning working environment conditions, products and possibilities of exposure. In making any decision on risk reduction in the working environment the limited amount of resources available should also be taken into account. Secondly, the results of our studies were taken into consideration in our new ordinance concerning work with VDU. The study specified the

phrase "a significant part of the working day" used in the EU directive as well as in the Estonian ordinance of VDU. Also, we found out how the length of working time with VDU influences the users' health. It is pointed out that workstations must meet ergonomics principles and that breaks for rest depending on the working time with VDU is necessary.

In our study 64.9% of the students working in offices and 59.0% working at home were female. Of those female students working in offices 23.6% had no health complaints, the relevant proportion of female students working at home was 39%.

TuW18: Agents and Activist for Change, Different Aspects

TuW18: 1 Alliance Building towards Women's Work in Rio De Janeiro: Prospects and Difficulties

Isabela Cabral Félix de Sousa Rio de Janeiro, Brazil

This paper focuses on professional women's views related to alliance building at the Municipality of Alliance building is defined as collaborative practices or as collective social actions. The practice of alliance building within and among organizations is considered done essential way to reach social transformation, a strategic gender need.

Therefore, this research highlights the interviewees' observations and needs related to projects for women, their values attached to their field of work, and their perceptions in regard to alliance building within and among institutions. The research method employed was qualitative inspired by sociology and anthropology. This research included institutional visits, observations, interviews and interactions with the subjects under study. In depth interviews were guided to 20 women working to improve women's condition (10 working at private organizations and 10 working at governmental organizations). The results indicate that womens' views were diverse and denote both promising prospects and difficulties for both the future of women's projects and the possibility of alliance building among and within institutions. Based on the findings, some suggestions are made to foster social change through alliance building.

TuW18: 2 Gender and Sexuality – an experience with popular classes educators in Brazil

Claudia Andrea Mayorga Borges de Godaoi Complutense University in Madrid, Spain

In this paper I will present an experience realized in Belo Horizonte, Brazil with female educators of children and teenagers of popular classes. The theme I have worked with them was sexuality and gender and the method was the workshop. The educator's demand was very specific: they would like to work about sexual violence, child prostitution, homosexuality and early pregnancy. I started clarifying fundamentals and essential concepts to the dialogue about sexuality and gender: sex, sexuality, health, gender, power, patriarchate, relation – communication, pleasure, sensuality, etc. I did not want to do this intervention only giving information. So I have utilized the workshop method that consists in a psychosocial practice with three principal ideas: the importance, to the educators, of an active role in the discovery of knowledge (the female educators were not there only to receive information in a passive form, but they were part of the process of knowledge construction.

This process happened because the communication was possible without the exclusion of the conflicts, sharing values, language and social practices – with other words, the female educators discovered that they were autonomous and they could take an active part in the transformation of

reality); the importance of reflection and thought that includes cognitive and affective aspects (the female educators had to think about his practice considering psychological and affective aspects — they could tell about their practice with children and teenagers, about their fears and insecurities, trying to understand that some of their problems had relations with their psychosocial condition as women in the popular classes, trying to describe the relation between subjectivity and work) and the importance of social context in the construction and transformation of social perception and the knowledge construction (one objective was trying to give to the female educators conditions to multiply this kind of work in their communities after a deep reflection about sexuality and gender). Results: The educators constructed intervention projects to their communities. Two projects were realized: sexual violence and early pregnancy. In both of them, the educators had worked with the political notion of gender. Conclusion: I conclude that the problems of educators can be understood in a complex form and we have to considerate that this problems are consequence of a biggest social structure (patriarchate for example), their conditions as women in this society and the certainly that they have actives roles in the transformation of reality.

TuW18: 3 The female union: the first Italian journal of women (1901-1905)

Daniela Fano Milan University

At the turn of the 20th century, assistance and emancipation issues were confronted with feminine specificity and there appeared figures of women and associations able to gather strengths and initiatives otherwise scattered and doomed to failure.

Among them, Ersilia Bronzini Majno (1859-1933) stands out. Her commitment for women started with her activity in the Obstetrician Guard (founded in 1887, first example in Italy) and continued through the Societies of Mutual Aid, along a path that approached her to the specificity of female proletariat within the more general working class issues.

The crisis due to the repression of popular movements of May 1898 evidence the necessity of union of many if not all female associations, specially those pertaining to the working class, under a kind of umbrella-organization, able to protect and strengthen them. Tat is why in 1899 Female Union was founded by Ersilia Bronzini, Majno, Edvige Vonvwiller, Ada Negri, Jole Bersellini Bellini and others, and it is still quite alive in the Milanese culture and society.

From 1901 and 1905 the monthly journal the Female Union was published and it launched the major suffragist campaigns of the early 20th century.

The present contribution will analyse such publication, as a source of learning and useful brainstorming on an era, like the present one, when some females' problems (the new slave trade, maternity, health, working conditions of migrated women, etc) recall in some ways those of one century ago, as faced by the women of the Female Union.

TuW18: 4 Encouraging empowerment, Encouraging action, Encouraging social and behaviour change

Gunjan Sharma The Naz Foundation (India) Trust

The Indian society and economy is undergoing tremendous change. The market has opened up and with new and exciting options for communication; every thing seems affordable and buyable.

However to the average Indian there still remain some areas, which are still confined to hushed conversations, if at all.

Open and candid discussions on sex, sexuality and even reproductive health are still frowned upon. What then is the response to issues such as HIV, sexual health, safer sex and even reproductive health issues, especially amongst women who do not enjoy the mainstream status.

At the state and government level, nearly none.

This then leaves the large share of the responsibility on non-governments organisations and social activists who then take on the huge task of engaging in these activities.

Prevention works, indeed. However, nearly 16 years into the HIV infection, we still don't know what really works and what can be termed as a successful intervention.

Ngos such as the ones I am and have been associated with have taken on the responsibility in pioneering interventions which directly, openly, yet professionally and with sensitivity, continue to discuss issues considered taboo and immoral. Issues which women are not supposed to either know or acknowledge, yet bear the brunt of, be they, early unwanted pregnancies, sexual abuse, molestation, rape, even incest, and of course, very quick HIV infections, in spite of the 'sex after marriage', 'one partner' pill which the governments easily hands out.

This abstract and presentation, shall try to highlight some of the activities we have undertaken in empowering particularly women on issues of sexuality, sex, sexual and reproductive health.

The abstract will in brief also mention about some of the interesting inferences we have drawn in our interacting with women of various age groups, and socio economic strata.

The interventions have been at various levels.

One, we have worked intensively with an adult group of women from the local urban slum community, which is basically women of migrated workers families who settle in the city for work.

In this intervention we have seen that in spite of the claims the state and government of making information available, this is not exactly so.

Women in this group got to know about sex only after it happened with them, mostly in the 'first night of marriage' approximately when she was in the age group of 16-18 years.

With repeated, intensive, participatory discussions, it was this group of traditional, dislocated women who decided that the presenter should run similar sessions with their daughters, daughters in law, sisters, nieces, so that "at least they know and are able to handle situations better that us".

What about too much information encouraging young people to experiment, we asked.

Information is for healthy and dignified choices, is what they told us.

Indeed, general information is available. However, women and particularly those from marginalized sections have neither safe spaces nor easy access to any education, communication or counselling on their sexual health issues; nor are there any referrals which are professionally run or women sensitive.

This role is large performed by ngos and activist organisations.

Be it in small group discussions, long term interventions, short workshops, or even large-scale community intention, it is not who really do make the difference in our country, especially in issues of the ones staed.

The same applies for adolescents. This was the second group the presenter ran, with young girls of the same community, in the 14-16 age group.

In spite of the huge focus and premium being put on prevention with adolescents, there are few programs which directly address young people, especially from marginalized communities or even main stream private schools/colleges.

We have conducted various sessions with both the groups, adolescent girls from communities and those from mainstream strata.. Both the communities are distinct yet very similar in various ways. Our work has shown us some startling truths.

Be they adolescents from communities or from mainstream, they both lack in clear and appropriate information on issues of sexual health, including HIV.

They hardly have any skills of negotiation for information, safer sex and nearly NO safe spaces to discuss issues of personal nature. There are no centres except those run by NGOs which young people can access or depend upon. In a country where the average young woman gets married by the time she is 20, this then puts a huge impact on her own life choices, for until now she really has none.

To give and example, a 'write- in' radio program which addressed issues of sex and sexuality for young people was put off air by the government in 2 months of its broadcast, for it was considered embarrassing and unnecessary.

It is this year that the government has made it mandatory for private schools to include, life skill education in their curriculum as an extra curricular program. But it still shies away even from using terminology (sex education for example) thereby again giving the information under some garb of morality leaving it to subjective interpretation and avoiding what it needs to do by addressing it as directly, openly and appropriately.

Government programs have put no focus or premium in training young people on responsibility, negotiation skills, addressing issues of self-esteem or even putting in services for information and /or treatment.

It is then the efforts of the NGO sector, which actually takes on the task of addressing and educating young adults in these issues.

Be it through large scale community based programs, small interventions with small groups, workshops in mainstream schools, lobbying and activism, NGOs seem to be the best possible solution.

It also seems as if this is the model that really works. The disinterest of the government in these is issues are well known and also unreliable. Experience shows, if provided,

professional ,democratic and respectful places and spaces to discuss, share and clarify, the women, of whatever age group, socio-economic strata they may be, they respond and then take on the responsibility to attempt safer, healthier choices, and life styles, which then impact her own health as well as that of the family, community and society.

The presenter will attempt to highlight, in her presentation, how we have achieved some amount of attitude and consequently behaviour change through our various interventions.

TuS10: Women Entrepreneurs and regional Development, 2

Chair: Hanna Westberg, Co-Chair: Inger Danilda

Organiser National Institute for Working Life and Ministry of Industry, Employment and Communications

TuS10: 1 Gender Equality and Regional Development How to bring about growth and development?

Hanna Westberg National Institute for Working Life, Stockholm

More and more attention is being paid today to the fact that it is the conditions offered by the local society – trust, confidence and social networks – that determine whether people take the risk of, for example, starting their own business and driving through the processes of development. These local microprocesses give rise to what is generally known as growth.

The aim is to show the importance of the local and regional dynamics for the development of society. We will stress the importance of how significant various processes on the microlevel are for macroeconomic development, and especially shed light on the different conditions for women and men in the local-, regional and the global society.

TuS10: 2 Economic growth versus sustainable growth a question about rationalities. How to bring about growth and development?

Hanna Westberg National Institute for Working Life, Stockholm

The government of Sweden has requested that all counties arrive at growth agreements together with all municipalities. The growth agreements aim to achieve active participation from people in different regions in order to create a dynamic and developing industry, increase employment and raise the level of competence and education. The programme will carry out research into the functioning of these regional growth agreements.

Gender Mainstreaming can be defined as a strategy for achieving equality between women and men in all areas of decision-making in the public and private sectors. It aims at realising the full potential of all members of society to contribute to social cohesion, competitiveness and growth.

I have been focusing on how the partnership in the Growth Agreement is taking into consideration that humanity consists of 50% of both sexes. I try to illustrate that Gender Mainstreaming and equal Opportunities play an important role to promote strong and sustainable economies and growth.

TuS10: 3 Is it possible to increase the growth in a region by breaking the gender divided labour market and education?

Torstensson Britt-Marie Sweden

The growth agreements, which have been the result of joint efforts within the county of Gavleborg, reveals that one of the most important tasks is; "to break the gender divided employment market and education in order to increase the growth in the county". Compared to other counties in Sweden Gavleborg has a pronounced gender segregated employment market. As a result many young women have left the county which has affected the demography. By order of "Growth Gavleborg" an interest survey was carried out involving the business community, local authorities, national organisations and non-profit associations. After that interested parties were invited to a dialogue conference. At this conference a development partnership was founded. The development partnership has chosen to work with the following vision:

"By co-operating in a deeper sense, long-range planning, dialogue and supplementary theoretical knowledge in the area of gender equality, we want to achieve a deeper understanding for the underlying structures that influence and govern our choices and actions. In that way we will obtain increased knowledge which will provide opportunities for a decreased gender segregation in the labour market, in working life and in education."

I am going to report from the actions made so far in the development partnership and problematize Women's health.

TuS10: 4 Improving the Infrastructure for Women Entrepreneurship – A tool for Regional Development

Agneta Hansson Sweden

Research focus

To meet the needs of (potential) women entrepreneurs and increase women's access to support structures for business development and training – enterprise agencies, regional authorities as well as the entrepreneurs themselves, must get a better understanding of the conditions for women running their own businesses. Research focus in this paper is on how this understanding can be achieved and how we can improve the infrastructure for women's entrepreneurship through constructive dialogues and networking.

Case study

Through a European Leonardo da Vinci project called GROW (a Guidance to Raise Opportunities for Women) reference groups with researchers, practitioners and women entrepreneurs have been formed in seven European regions. Within the project framework a methodology for analysing, planning and arranging training and support for (potential) women entrepreneurs has been developed.

TuS11: Work, Psychosocial Factors and Women's Health at Midlife

Chair: Aila Collins

TuS11:1 Work, Psychosocial Factors and Women's Health at Midlife

Aila Collins Karolinska Institute, Stockholm

The aim of this symposium is to analyze women's health at midlife in relation to work role and domestic role. Midlife may be characterized as a vulnerable phase for women. Employment per se has been found to be positive for women's health. However, the majority of middle-aged women are employed in jobs with high demands and low control. Also, there is an ongoing debate as to whether multiple roles are negative or beneficial for women. Despite progressive policies women bear the brunt of domestic duties. In Sweden, women perform three quarters of household duties. Cross-cultural comparison seems particularly important concerning the total work load of women. Domestic duties in combination with high strain jobs are related to higher reports of common health symptoms among Swedish women. The results of a study examining women aged 35 to 45 working as housemaids in Peru showed that several sources of stress affected the somatic and emotional health of the women. Permanent employment, a higher level of education and a wider social network served as buffers against the stress. A Swedish study found a high proportion of burnout among women employed in the public sector. Women with high burnout scores reported more somatic, emotional and cognitive symptoms than those with low or intermediate levels. Women in white-collar jobs were monitored during 24 hours by computerized diary and ambulatory blood pressure, heart rate and activity measures. Women in high strain jobs had higher systolic and diastolic blood pressure during work and leisure than those with low strain jobs.

In conclusion, job conditions and multiple roles play an important part for women's health at midlife. Employers need to be aware that high strain jobs have a negative impact on women's health and working capacity and that redesigning jobs as well as early intervention may prevent development of stress-related symptoms among a great proportion of working women.

TuS11:2 Double Exposure: the Combined impact of Domestic Responsibilities and Job Strain on common Symptoms in employed Swedish Women

Gunilla Krantz

Nordic School of Public Health Gothenburg

Background: This study investigated the influence of domestic responsibility and job strain, and especially simultaneous exposure to these factors (i.e. 'double exposure') on common physical and mental symptoms in Swedish women.

Methods: A questionnaire containing items on socio-economic factors, domestic responsibilities, and psychosocial working conditions was sent to a random population of women, 40 to 50 years of age, in a rural Swedish community. The response rate was 81.7 % (397 women). Multiple logistic

regression analyses were used to test for potential confounding factors and effect modification. Attributable risks were computed based on prevalence data.

Results: Women shouldering great domestic responsibility or who experienced job strain were at risk of a high level of common symptoms (OR 1.76; 1.04-2.97 and OR 3.48; 2.05-5.92, respectively). 'Double exposure' considerably increased the odds for common symptoms (OR 6.91; 2.58-18.48), with support for synergy noted. The population attributable risk (PAR) of great domestic responsibility was 10.0% and of job strain it was 26.7% in producing a high level of common symptoms. The corresponding figure for the population of women subjected to 'double exposure' was 11.8% and for the population of women subjected to either single or 'double exposure' the PAR was 30.3%.

Conclusion: Heavy domestic responsibility and/or a job strain situation are factors that seem to make important contributions to the causes of a high level of common symptoms among salaried women 40 to 50 years of age. 'double exposure' showed a particularly high risk because of synergy.

Key words: common symptoms, domestic responsibility, 'double exposure', job strain, women health.

TuS11:3 Psychosocial Factors affecting the Health of Migrant Domestic Workers in Lima

Marta B. Rondon Psiquiatra - Salud Mental de la Mujer, Peru

Peru is a multicultural, multiracial country. Due to the economic crisis and the political violence of the past twenty years, large numbers of people have migrated to urban areas, especially Lima. As they lack the skills to enter the formal work force (which has significantly decreased at the same time), women tend to seek informal employment as housemaids. These women lack the social support systems present at their communities of origin and are usually required to live in the employers' home, which deprives them of family and peer support. Aside from carrying out routine, scarcely gratifying tasks, they are subject to long non-defined hours, enjoy no legal protection, pension plan or health insurance, lack protection from violence at the work place, and spend their days in isolation. We will discuss the impact of these circumstances in female workers in different settings and present results from research carried out in a group of housemaids in Lima, the objective of which was to determine the impact of the factors mentioned on their sense of well being.

Method: fifty women, aged between 35 and 45, working as housemaids in Lima were interviewed. Using a semi-structured interview, information was collected regarding their time of residence in Lima, the type of family they have, the characteristics of the work place, whether they have access to state health insurance, and about their social support system. The existence of practical, emotional or problem-solving support was established by means of specific questions. The General Health Questionnaire (12 item version), the Rosenberg Self Esteem Scale and the Personal Health Scale (Mezzich, Caldera and Berganza) were applied to assess emotional distress.

Women were also questioned about general health status and symptoms, using a standard hospital format.

Results: Longer times of residence in Lima, longer permanence in the same job, higher educational level, not living in with employing families, and the existence of family and social support are related to lower levels of emotional distress in women working as housemaids.

Interviewed women have a higher rate of violence episodes than the general population. Women desire to form networks, to obtain training both specific to the jobs they have but also in different areas and they would not wish their daughters to have similar jobs.

The large group of women working as housemaids in the urban areas of the country are subject to several sources of stress which undermine their general and emotional health.

TuS11:4 Early Indicators of Stress/Burnout in employed Women

Aleksander Perski, Giorgio Grossi, Birgitta Evengård, Vanja Blomkvist, Berrin Yilbar, Kristina Orth-Gomér

National Institute for Psychosocial Factors and Health, Karolinska Institute, Stockholm, Sweden

This cross-sectional investigation aimed at assessing levels of burnout among female employees within the Swedish public sector. Other aims were to study the associations between self-rated burnout and psychosocial factors at work, as well as findings from medical examinations. Data was collected by means of questionnaires including the Maslach Burnout Inventory, among 183 women working in geriatric care and 143 employees at the National Social Insurance Office. We found high proportions of burnout in both samples (geriatric care = 34%; Social Insurance Office = 26%). Participants with high scores for burnout reported more job-strain, less social support at work and more somatic, emotional and cognitive complaints than those with low or intermediate levels. Medical examinations were performed among 19 participants with low and 41 with high scores for burnout. The medical examinations revealed significant more findings among participants with high burnout, particularly fatigue, sleep disturbances and cognitive impairments. This study shows that individuals at risk for stress-related disorders may be identified with simple questionnaires. Early interventions against stress in the workplace may prevent incapacitating conditions among a great proportion of women working in the public sector.

TuS11:5 Job Designs are associated with Relaxation and Cardiovascular Health Outcomes for Women

Renate Rau and Antje Triemer University of Technology Dresden

Since the majority of job strain studies are biased by self-reports about the job, it remained an open question, if negative health outcomes are the results of objective work conditions or of the habitual influenced perception of work conditions or of both. To answer this question would require the decision of the kind of intervention like modification of behaviour, selection of people or redesigning jobs.

117 women and 124 men employed in white-collar jobs (aged between 20 - 66 years) were tested during 24 hours of a real working day by means of a computerized diary and ambulant monitoring of blood pressure, heart rate and motor activity. Jobs were analysed by using objective and subjective methods. Based on the results of the objective job analysis by using the Task Diagnostic Survey jobs were classified as those exposing employees to low job strain, to high job strain and to active jobs.

Jobs that expose employees to high job strain were only found for women. In contrast, jobs that expose employees to active jobs were only found for men. Therefore, only the jobs of the women

could be considered for the comparison of the exposure to high versus to low job strain. Neither current state of perceived demands and perceived control nor self-reports about job demand and decision analysis differed between women, who were exposed to high job strain and those exposed to low job strain. However, daily blood pressure was influenced by the exposure to job strain.

Women exposed to high job strain showed higher systolic and diastolic blood pressure during work and night than those exposed to low job strain. Furthermore, more women with disturbed relaxation ability were found in the group with high job strain than in the group with low job strain.

In conclusion, negative psychological and physical health outcomes of the exposure to high job strain in women seems to be possible, even when the exposure to job strain is not experienced subjectively.

TuS12: Gender sensitivity in occupational health: an issue for life quality and work efficiency

Chair: Kaisa Kauppinen

Organiser: European Women's Health Network (EWHNET)

TUS12:1 Gender Sensitivity in Occupational Health: an Issue for Life Quality and Work efficiency

Kauppinen Kaisa with Lea den Broeder (Netherlands), Vera Lasch (Germany, and Leonore Nicolai (Netherlands) and Sarah Copsey (Spain Finnish Institute of Occupational Health, Finland

Purpose

The purpose of the seminar is to analyse the implications of gender sensitivity in occupational health. The aims is to add more visibility and create gender-sensible strategies in occupational health. The presentation is based on a Working group on Occupational Health of the European Women's Health Network (EWHNET). The network was founded in 1997 as a project in the Medium-Term Community Action Programme on Equal Opportunities for Women and Men and was supported by the German Federal Ministry for Family Affairs, Seniors, Women and Youth.

Why gender sensitivity in occupational health?

Because of strong gender segregation, women and men are exposed to different workplace environments and different types of demands and strains. There is a need to develop appropriate methods, tools, procedures and strategies to deal with gender-related and gender-specific health risks at work. Gender-sensitive approach in occupational health acknowledges that certain health problems are unique to or have more serious implications for either men or women.

Conclusions and Discussion

In the seminar, the new issues and strategies will be discussed. It is important to emphasise the global view and significance of multiple exposures, both physical and psychological, and to use a gender-specific approach when needed.

Additional symposium topic

A study is being carried out for the European Agency for Safety and Health at Work into the occupational safety and health of women at work. The work is being carried out by the Agency's Topic Centre (consortium of research institutions) on Research-Work and health. The broad aims of the report are to:

review and summarise existing information in this area highlight any gaps in knowledge and assess the implications for the occupational, safety and health of wome

At the present symposium, preliminary results from the study will be presented by <u>Sarah Copsey</u>.

TuP05: Ergonomic Physiological: Exposures and Health Effects

TuP05: 1 Work-Related Musculoskeletal Disorders In A Sample Of Workers From Rome Area: Gender Differences

Adriano Papale, Tiziana Paola Baccolo, Silvana Palmi National Institute of Occupational Health (ISPESL) Monteporzio Catone (Rome), Italy

Introduction: Work-related musculoskeletal disorders are one of the most common occupational ailments affecting millions of workers in all types of jobs and employment sectors every year. Literature reviews indicate that these disorders affect women workers more than men, largely because of the type of work they do (a higher percentage of female workers do permanent repetitive work compared to male workers, many workplaces are ergonomically inappropriate for women) than because of gender-related biological differences (muscle strength and distribution, sets of muscle fibres).

Materials and Methods: This study investigated the presence of work-related musculoskeletal symptoms in a sample of workers (238 male and 220 female) employed in the following sectors: supermarkets (shop assistants/cashiers, loaders/unloaders); banks, pubblic administrations (secretaries, typists, clerks, VDU operators); cleaning companies (cleaners). The study was conducted by means of a self-administered questionnaire on musculoskeletal symptoms, lifestyle and risk factors (work postures, repetitive movements, heavy lifting).

Results: 66.5% of the workers reported back pain, with 59.9%, 22.5% and 71.1% for the cervical region, dorsal region and lumbosacral region respectively, and these symptoms affected women workers more than men (these data are given in table 1).

T 11	4	D 1	•
Table	1	- Back	naın

SECTORS	WOMEN %	MEN %
Supermarkets	54.5	40.0
Cleaning companies	65.2	60.0
Pubblic administrations	70.7	38.1
Banks	69.2	57.1

In women back pain was generally associated with awkward work posture and poor work station design, in men it was associated with heavy load lifting, this because of the different distribution of work tasks between men and women workers. Moreover data about paid/unpaid work indicated that women spend on high physically demanding activities like household work and children-care more time than men.

The prevalence of upper limb symptoms in men and women are shown in table 2.

Table 2 - Upper limb symptoms

	WOMEN %	MEN %
Shoulder	43.6	33.0
Elbow	9.4	12.1
Wrist	26.1	12.1
Hand	32.4	17.2
Fingers	23.4	15.9

These symptoms also affected women workers more than men (excepting elbow), this because female workers were employed in more hand intensive and repetitive tasks compared with male workers. Frequent users of VDU had significantly more upper limb problems than infrequent users with not significantly gender differences.

Conclusions: We conclude that musculoskeletal disorders have a high prevalence in all working sectors examined and women appear to be at particular risk, prevalently because of the type of work they do.

References: European Agency for Safety and Health at Work 1999. Work-related neck and upper limb musculoskeletal disorders. Buckle P., Devereux J.

European Agency for Safety and Health at Work 2000. Work-related low back disorders. Op De Beeck R., Hermans V.

TuP05: 2 The Prevalence of Musculoskeletal Disorders among Female Trolley-Bus Drivers

Nijol Maiulyt, Remigijus Jankauskas Institute of Hygiene, Vilnius, Lithuania

Trolley-bus drivers are exposed to occupational physical, chemical, ergonomical and other factors which may have influence on the development of musculoskeletal disorders.

Aim of the study – to identify the prevalence of musculoskeletal disorders among female trolley-bus drivers and their conditions of work.

Object and methods: In the study, there participated 176 female of public transport drivers. Their conditions of work were evaluated after having determined the concentrations of chemicals and having measured the levels of noise and vibration at their place of work. The health status of drivers was assessed according to the diseases diagnosed by the physician and using the questionnaire prepared on the basis of the standartised Nordic questionnaire.

Results: Analysis of biographical particulars showed that the conditions of work were assessed as satisfactory by 68,2 % of drivers, 17,4 % of drivers evaluated them as poor, 14,7 % - as good and 0,3 % - excellent. Study findings show that 64,1 % of drivers are suffering from the motor apparatus problems which manifest themselves as strain, pain or discomfort. Analysis of the findings according to separate parts of the body indicated that 44,9 % of drivers complained having problems of different nature in the area of the low back, 32,4 % - in the area of the neck, 22,7 % in the right shoulder, 26,1 % - in the left shoulder, 27,8 % - in the back, 39,8 - in the area of the right arm, 22,7 % - in the area of the left arm, 36,4 % - in the right leg and 32,4 % - in the left leg.

The results obtained will be used to prepare proposals for the optimisation of trolley-bus drivers' conditions of work and for the prevention of occupational musculoskeletal diseases.

TuP05: 3 Strain of Female Organism at Repetitive and High Rhythm Work

Hilda Herman
Institute of Public Health, Bucharest, Romania

Study carried out in the fine ceramics industry, where many women work at various workplaces, with the aim to show their organism strain level and establish prophylactic measures. Four women's activities were investigated: modelling plates on semi-automatic machines, wipping the cup base, pressing tiles on automatic machines, sorting tiles. Research methods included: work and equipment analysis; working environment characterization; assessment of the organism charge by telemetric heart rate (HR) registration during workday, energy expenditure (EE) measurement per operations, subjective symptomatology investigation, in 28 young female workers (7 subjects at each activity). The health state was studied by the morbidity analysis for 50 women working at these workplaces.

The work analysis showed that the processing of each ceramic object constitutes a technological cycle which is repeated continually in the workday in high rhythm according to the high running speed of the machine. The machine feeding with raw material (ceramic paste) or with semi-processed products and the removing of the processed products from the machine are made manually. The material and product processing are automatic. The women worked permanently standing and they displaced frequently loads held by the both hands in ventral position on horizontal plane and on distances of 1-5 m. The loads had to 10 kg, totalling in a workday of 8 hours several thousands of kilos (for exemple: 6,000-15,000 kg at modelling plates) because of the high running speed of the machines wich process a great number of products. The upper limbs make frequent movements of large amplitude to take, displace and place the material or the products. The neuropsychic charge is sensorial (visual, tactile, psychomotor) and of the attention; the work has a great monotony. The environmental factors had in general normal values, only near the drying installation at the modelling machine the air temperature was higher (above 25°C) and the air dust concentration could exceed the TLV at the pressing machines.

The HR of 100-130 beats/min (mean of 104-120 beats/min) and the EE of 3-4.6 kcal/min show an important strain of the female workers. Before the work in standing rest the HR was 75-78 beats/min and it increased with 23-55 beats/min (23-42%) during work. The HR has not decreased under 100 beats/min and it was in most cases above 100 beats/min during work because of the high work rhythm. The level of the organism effort was especially influenced by the load value and the frequency of the load displacement.

The morbidity called attention to the presence of the genital diseases and pregnancy troubles, of the neuralgia in various body zones and of the asthenic neurosis, which can be favoured by the work conditions. The investigated women have presented complaints of back pain, of general fatigue during work and also their presence during some hours after the work.

Results showed that the strain of the female workers could not be ignored at the mechanized and semi-automatic machines for processing products in the industry. It is necessary to adapt the work rhythm of these machines to the possibility of the female organism by adequate technical and organization interventions. The manual displacement of the loads must be intermittently at intervals established according to the load value, and it is also necessary to limit the total load weight which can be carried by the women in the whole workday.

TuP05: 4 The work related musculoskeletal disease (w.r.m.d.) emotional repercussions in workers daily: The threatening invisibility

A.Chiesa; A.Garbin; I. R.Neves,

Centro de Referência em Saúde do Trabalhador do Estado de São Paulo (Cerest/Sp)

The present work relates the implantation of a new experience on intervention, called Therapeutic Pedagogic Workshops, developed with patients with W.R.M.D. (Work Related Musculoskeletal Disease) in a Public Workers Health Ambulatory, mainly focused to the psychological repercussions on the patients life.

The theoretical basis and the methodological option are described. The method was structured by group dynamics, which included the expression of the participants' knowledge, and feelings related to their lives and inter-group communication.

Four workshops were developed, including 36 participants, structured in eight thematic meetings: "Body", "Work", "Limit", "Fault/Responsibility", "Pain", " Daily after sick", " Relationship with relatives, partners and health professionals" and "Perspectives to overcome the problem". The meetings utilized strategies based on Psychodrama and dramatic games as model mass, designs, scrap iron, clips, collage and role playing, in order to facilitate the theme reflection and expression.

The therapeutic pedagogic workshops allowed to know deeply the most important aspects of the workers emotional suffering as the low information about the sickness, the distance from the work, blaming the workers by their illness, the difficulty to realize daily activities, commitment of the personal relationship and recognizing the discrimination process.

Generally, the most important suggestion risen from the workshops emphasized the opportunities to make choices as an human necessity of the workers, to improve their individual and collective empowerment process.

TuP05: 5 Physical and psychosocial job factors associated with musculoskeletal disorders in public transport drivers in Latvia

M.Eglite, L. Matisane, A.Veide

The Institute of Occupational and Environmental Health of Medical Academy of Latvia

Incidence of occupational diseases in Latvia was 47.69 cases per 100.000 workers in 2000. Diseases of musculoskeletal system ranks in first place (186 new cases or 38.0%) in the structure of occupational diseases. There has been a rapid increase of new cases of musculoskeletal diseases comparing with year 1999 (75 new cases or 20.3%) that draw our attention to the problem. The analysis of workplaces has pointed out that 62 of female patients are working as public transport drivers in the same company.

The aim of the study is to analyze occupational risk factors and musculoskeletal disorders among women serving as tram and trolley bus drivers.

Methods. Data from Latvian State Register of Occupational diseases have been used for analyses of health status and risk factors. Records of the company and State Labor Inspection were used to supplement information on employment history and exposures.

Results. The 3-year prevalence of officially registered occupational musculoskeletal disorders is 14.7% for women working as public transport drivers (62 cases, n= 421). All patients suffer from back pain of different level caused by spondylosis deformans. Cervical part of the spine is affected

in 90.3% of cases, lumbal part - 79.0%, sacral part – 64.5%. Osteoarthritis of various joints has been diagnosed to 74.2% of patients, ligament injuries - to 25.8%. The length of the service before the official registration of occupational diseases was between 20 and 53 years, length of service as tram and trolley bus driver- between 6 and 44 years. The average loss of work ability has been detected to be 15-24%.

Analysis of physical work load (mechanical load on the spine, forced work postures, movements of the trunk during work, whole body vibration), and psychosocial and work organization factors (long length of service, overtime work, high psychological demands, job dissatisfaction and low social support) points out the necessity for intervention efforts in this high risk occupation.

TuP05: 6 Musculoskeletal Discomforts among VDT Workers – Individual, Organizational and Ergonomic Factors

Unhee Chang Korea Occupational Safety & Health Agency

Introduction

Musculoskeletal problems among workers have become the subject of growing concern with expanding use of video display terminals (VDTs). A number of individuals, organizational and ergonomic factors of presumed importance for the occurrence of musculoskeletal discomforts was investigated in a group of VDT workers.

Aim:

The aim of this study was to clarify the contribution of the workplace ergonomic factors to musculoskeletal problems among VDT users. This objective takes on special significances in indications of increasing musculoskeletal disability among VDT workers in the Korea.

Methods

Three types of data collection methods have been used 1. Questionnaire 2. Interviews and 3. Inspections. The site and frequency of musculoskeletal discomforts were collected in a group 1142 workers (846 VDT users; data entry, word processing, CAD and telephone operators, 296 non VDT users). A subsample of 23 worksites were drawn for the purpose of detailed ergonomic evaluations.

Results

Occurrence's of musculoskeletal discomforts:

The occurrence's of questionnaire-reported musculoskeletal discomforts were fairly high in VDT users, with the most common locations in the neck (65.6%) trunk(57.7%) and shoulder(53.0%).

Influence of individual factors:

Higher prevalence of musculoskeletal discomforts for women compared men has been detected. Influence of organizational factors:

No rest (60.9%) and limited rest breaks and peer contacts were associated with increased occurrences of musculoskeletal discomforts.

No trained assessor and lack of information on VDT work of employees and employers were evaluated.

Ergonomic factors:

Table and chairs; Insufficient table work surfaces(58%), leg space at table and were evaluated. 34.8% of workers were used a chair with adjustment levers. 30.4% of workers used a chair with armrest and 82.6% of workers were used a chair with backrest. VDT utilities; Highly placed keyboards(82.6%),VDTs were evaluated. No use of wrist support was found.

Discussion

The findings provide examples of important factors for musculoskeletal problems of VDT workers, it should be relevant for intervention activities. The results suggests to develop and implement of guidelines and screening methods for the identification of ergonomic risks at VDT work and to develop and implement of training program for occupational safety and health personnel.

TuP06:Occupational Health Service Activities and Improvements

TuP06:1 Industrial Rehabilitation Nurses Course

Margaret Siziba Harare Zimbabwe

Aim:To equip industrial nurses with adequate knowledge of implementing early effectiveness and efficient care in rehabilitating the injured worker so that the worker goes back to work early allowing him/her to retain his/her employment.

Method: The course was first introduced in 1998 at the National Social Security Rehabilitation Centre. This course was found necessary so that the injured workers regain functional capacity within the shortest possible time following an injury. The training programme lasts for 10 working days and is tailor-made for nurses who already work in industry. The following topics are covered;

- (a) Rehabilitation administration procedures.
- (b) Referral systems.
- (c) Physiotherapy.
- (d) Occupational therapy.
- (e) Nursing Care.
- (f) Industrial Clinic operations
- (g) Prosthetic and arthotics supplies and their guide lines
- (h) Social Rehabilitation and counseling
- (i) Vocational Training and setting up domestic
- (j) Follow-ups and the role of Regional Office staff.
- (k) Cutting on unnecessary costs.

Results:To date fifty nurses out of one hundred and fifty have been trained within one year including our own stall nurses at the Rehabilitation Centre.

- a) Nurses are able to timeously attend to the injured worker before referring them for further medical care this helps to minimize injury complications such as
- Formation of localized fibrous nodules.
- Shortening of muscles and tendons leading to contractures.
- Ankylosis and stiffness of joints.
- b) More, and more nurses are keen to attend this course and this is held twice per year with an intake of 10 nurses per course.

Conclusion: After completion of course the nurses are, awarded with an Industrial Nurses Rehabilitation certificate and are able to continue consultations with the NSSA Rehabilitation Centre even after completion of the course. All the nurses have evaluated the course as an eye opener to them and stakeholders who are employers and have seen the success of the rehabilitation programme.

TuP06:2 Occupational Therapy Assistance To Brazilian Women Suffering RSI

Karina Inoue

Worker's health reference Center of Sao Paulo State Health Agency, Brazil

Worker's health reference Center (CEREST) of Sao Paulo State Health Agency has been providing health assistance for workers suffering Repetitive Strain Injury (RSI), since 1986. From 1992 on, CEREST has been carrying on a Treatment and Rehabilitation Program, which involves a multidisciplinary team: medical doctors, physiotherapists, psychologist, acupuncturist, and since 1999, occupational therapists.

The Program is carried on for 4 month and it includes weekly activities, three groups (Physiotherapy, Psychology and Occupational Therapy) and individual meetings (Physiotherapy and Acupuncture).

Before the beginning of Occupational Therapy (OT) group, there are individual evaluations to gather information about each of the patients: personal data (name, age, familiar compositions and relationship); occupational history (position, time of work, a brief job content analysis): medical history, consequences of RS) (difficulties and limitations) on daily activities (DLA).

The Occupational Therapy Group happens in 15 meetings of 2 hours. Its objectives are observing and establishing the difficulties and limitations in the occupational dynamics; searching and proposing alternative ways of doing each activity. The Group has pedagogical-therapeutical purpose. The patients receive information on anatomy, appropriate posture, domestic environment adequacy and suggestions of adaptations and changes in daily life activities (DLA).

Visual devices, as photos, folders and books, are used to inform on postural and ergonomics aspects. Customized objects are used as examples to guarantee a clear understanding. The most used therapeutical resource is expressive activity, which allows reflection concerning specific subjects, limit, control, change, familiar participation in domestic tasks, breaks, better use of time environment physical characteristics, type of material and equipment, and division of responsibilities. It is followed by a discussion and exchange of experiences about occupational dynamics, the way each of the members went through their difficulties and RSI consequences.

The present study followed up 10 patients. Sixteen of them (84%) were women. It was observed that they had a stronger occupational dynamic when compared with the male population, especially in domestic tasks. OT evaluation included 38 daily life activities (DLA), of which 21 were domestic tasks. All women, except one – who had had paralysis of the left side of the body-, executed at least 15 of the 21; while each of the three men used to do 4, 8 and 10 tasks. This, besides the fact that RSI corresponds, in Brazil, to 90% of the notified occupational diseases, demonstrates the importance of stimulating occupations health activities directed to such an expressive clientele.

By the end of the Program, there were reduction of the difficulty level in DLA execution and/or increase of the range of activities for all the 10 patients. Those changes happened in 3 to 23 of the amount of 38 activities. Eight of the patients had improved till 10 of their activities; for other 10 patients from 11 to 20 DLAs had changed and one single patient had improved up to 20 DLA:s This poor result probably was related to the chronicity of the disease – among all the 26 patients, only 3 had presented the early effects for less than 2 years: other 6, from 3 to 5 years; 11 with time of manifestation between 6 and 10 years and 1 with symptoms for 14 years.

Evaluating the Occupational Therapy Group 80% considered it "Good". Those who classified it as "Regular" (20%) commented that the activity, as a therapeutical resource, should be used more often.

With regard to the Group's best contribution to their personal lives:

36% of the responses had considered the changes in DLA;

15% reflection and discussions about "Limit"

15% "Everything"

11% exchange of personal experiences among the group participants;

4%, information about posture;

4% reflections and discussion about division of tasks

4% learning how to make a better use of time.

Our conclusions were that RSI brings more negative consequences to women than man and early preventive and therapeutical procedures are very important for better results in treating RSI patience. Although, as we could observe from the patients' reports, even late occupational therapy intervention can contribute to a more active and independent life.

TuP06:3 Working conditions of women in Poland

Iwona Pawlaczyk"
NSZZ "Solidarnosc)

The provisions of Polish labour law guarantee special protection at work for women additionally to protection granted to all the workers.

Chapter VIII of the Labour Code, "Protection of women at work", and the article 176 of the Labour Code, regulate the issues of employment of women in case of especially hard or hazardous jobs and specific rights in the period of pregnancy and maternity.

On the base of the content of this article the Council of Ministers issued a decree including the list of jobs prohibited to the women. The list of jobs prohibited for women includes specific groups of jobs as follows:

jobs connected to physical exertion and transportation of heavy weights and forced body position,

jobs in cold, hot and changing microclimate,

jobs in noise and vibrations,

jobs in area of electromagnetic fields, you and ultraviolet radiation and screen monitors,

jobs underground, below the level of ground and on heights,

jobs in lowered or increased pressure,

jobs in area of harmful biological conditions,

jobs in area of harmful chemical substances,

jobs of physical and psychical hazards,

Specific examples of jobs forbidden for women:

manual lifting and transport of weights exceeding 12 Kg in constant work or 20 Kg in casual work.

manual lifting upwards weights exceeding 8 Kg in constant work or 15 Kg in casual work,

Women in the period of pregnancy and feeding are forbidden to lift weights as defined above when the weights exceed 25% of defined value, and also jobs in forced position and jobs in standing position for more than 3 hours per shift. Pregnant and feeding women are also forbidden to:

work in conditions of physical or psychical hazards,

work in forced rhythm, e.g. producing line,

work in drains, sewers and containers,

fire fighting,

chemical emergency actions,

removal of effects of disasters,

work with explosives,

butchering and work with inseminators.

Information on observing the provisions on protecting women by the employers may be found in reports of the National Labour Inspectorate.

822 employers (83% private ones) employing over 112 thousand workers (including 61 thousand women) were inspected in 2000. Transgressions in the area of women protection were found in 548 companies (66.7%, in 1999 - 63%).

The most of the employers do not create a list of jobs prohibited to women -40% of the inspected employers. This proves the difficulty of exercising this provision, which was pointed by NSZZ "Solidarnosc" on the project stage of the law in the Decision 90/96 1996 ref. opinion on the governmental decree on jobs prohibited to women.

The bill received a negative opinion due to incoherence and expected problems in exercising their rights by the working women.

The report of the National Labour Inspectorate also presents following transgressions: non-payments of equalising benefits to pregnant women transferred to lower-paid jobs due to pregnancy,

non-payments or under calculating social insurance benefits,

non-exercising the women's rights connected to child care,

employment of women in overtime and night shifts,

transgressions in termination of labour contracts of pregnant women,

employment of women in prohibited jobs.

non-payments of remuneration for periods of pregnancy leaves,

According to the National Labour Inspectorate among the reasons of transgressions are: incorrect work organisation and lack of good legal service in small companies.

The inspections were conducted randomly and referred only to a group of companies, so the effects are not very precise and do not reflect the whole range of problems referring to protection of women at work.

Also the data of the Head Statistical Office and reports of the Labour Medicine Institute cast some light on the problem reporting that 23 691 women were injured and 42 mortally wounded in work accidents in 2000.

This information may be and should be a subject to an analysis and discussion on protection of women at work in Poland.

TuP06:4 European Women's Health Network

Ute Sonntag

Landesvereinigung für Gesundheit Niedersachsen e.V., Hannover, Germany

The European Women's Health Network (EWHNET) has been a project in the Medium-Term Community Action Programme on Equal Opportunities for Women and Men of the European Commission and was funded from 1997 until 2001. The transnational network includes organisations in the field of women and health from nine countries. The network continues to work and strives for a new funding.

The poster presentation informs on eight poster (DIN A 0) about the structure of EWHNET, about the aims, the contents, about the necessity for changes in this field and the necessity to work European wide.

The foundation of all EWHNET-activities is a social model of health that includes socio-economic circumstances, lifestyles and living conditions. Therefore one poster shows what the Ottawa Charta, on of the most important declarations of the World Health Organisations (WHO) in the field of health promotion, means for women (gendering the WHO-framework).

The EWHNET-working group" women and occupational health" (contact: Dr Kaisa Kauppinen) will present their results in Stockholm . The poster presentation could complete the information about EWHNET .

TuP06:5 The "Umbrella Group" - How to inform about Work Environment in The Health Care Area

Birgitta Klaesson Örebro University Hospital

The "Umbrella- Group" consists of men and women representing different scientific backgrounds at the Department of Occupational and Environmental Health Örebro University Hospital.

Aim: The aim. Of the group is to the recent research about females work environment and to present this knowledge.

Main Task: To organise an annual conference on the theme "women work environment in health-care". The aim of the conference is to transfer current knowledge, to present good examples of preventive work in the area of work environment and to stimulate improvement of work environment in the health-care area.

Planning the annual conference generates ideas and a good insight in work environment for women. On a regular base, the group meets to discuss theme for the conference, find the most interesting speakers in the chosen area and to find examples of good ideas implemented how to improve the work environment in health-care. Extensive documentary research is done prior to the conferences.

Background: The "Umbrella Group" celebrated its 10-year anniversary in 2000. The theme for that conference was "A time for everyone? - Stress for some, recuperation for others". Two highly appreciated conferences were arranged for nighttime health care staff with the theme "To make the

night visible". In sum, 1200 guests participated on these two conferences. The first conference in 1990 covered a broader perspective concerning work environment in the health care area in general and the Minister of Labor participated as a speaker.

Technical development and work environment in the health care has also been exposed from a gender perspective.

The ÄDEL-reform (a reform within psychiatric care) and the changes within psychiatry have been highlighted as well as the working conditions for those who were not unemployed after the large cut-backs within the health care system in the 90's, and the Minister of Welfare was among the speakers.

The conference for the year of 2001 brought up issues about "Health, Power and Money – on Equal Terms". The perspective of equal shall, according to the Swedish parliament, be upon all political areas, and proposals and decisions must be analysed using this perspective. That means that men and women shall have equal rights, duties and possibilities.

During the eleven years with yearly conferences, a number of 5000 participants have taken part in the conferences.

Results. Our yearly conferences are well received by people interested in the work environment, representatives of health care personal, staff, shop stewards and trade union. The conferences have been well covered by the media. By arranging the conferences the understanding for different work task among health care staff both from a historical and current point of view and help us to create visions for a better work environment in the future.

WeW01: Psychosocial Exposures- Violence and Sexual Harassment

WeW01:1: Workplace Violence in Female Nurses

Nicola Magnavita

Catholic University School of Medicine, Institute of Occupational Medicine, Rome Italy)

The problem of violence and aggression in health settings is an ill-defined and underreported concern for health care workers. Despite an awareness of the problem by nursing staff, there is little known about these incidents.

Methods: A retrospective written survey of 77 female health care employees working at a long-term-care unit psychiatric unit in Campagnano (Rome, Italy). The survey elicited information about the aggressor, factors leading to the incident, the nature of the incident, how it was managed and the outcome. A revised Italian version of the Violent Incident Form (VIF) a checklist designed to simplify the registration of violent events, was used.

Results: Of the 77 staff, 74 (96%) completed the survey. A total of 19 incidents were reported. 70,4% (18/27) of day nurses and 8,3% (1/12) of night nurses reported at least one assault over time. No assault was reported by housekeeper, physiologists, and other health care workers. Violent incident included scratching, spitting, slapping, kicking and punching. Only patients were perceived as violent. Perpetrators of assaults were most typically diagnoses as having psychoses, or dementia. Violence in this sample was perceived as occurring principally in connection with unmet demands for such things as prescriptions and referrals, or with aggressive behavior of the patient.

In a minority of cases assaults had determined permanent physical impairment of the assaulted nurse. In almost all cases vivid description of the psychological consequences of assaults comprised fear, anxiety, humiliation, helplessness, and sometimes avoiding reactions. Violent incidents were severely underreported and only 2 cases have had formal injury report. Nurses identified lack of aggression management training as potential determinant of incidents.

Conclusions: Assaultive behavior is a significant problem for health care workers in the psychiatric department. Training and education strategies to de-escalate and prevent the rise in violent assaults in the health care setting are needed. Health care institutions need to be educated that they have much to gain from efforts to identify and reduce the problems of violence in these settings..

WeW01:2 Enduring Effects of Sexual Harassment on Female Vietnam Veterans

Margaret Kelaher, ¹ Jeanne Mager Stellman² and Steven Stellman²

Aims: There is little doubt that exposure to sexual assault can result in the development of post traumatic stress disorder and (PTSD) and compromised health. However very little research has focused on the enduring effects of sexual harassment on health. Women who served in the Vietnam War are a population particularly at risk of being exposed to harassment. We examine the impact of

¹Key Centre for Women's Health University of Melbourne

² Mailman School of Public Health Columbia University

exposure to sexual harassment during the Vietnam War on the long-term mental and physical health of military nurses serving within (n=986) and without (n=486) Vietnam.

Methods: Women on the Vietnam Women's Memorial project mailing list who served during the period of the war were invited to participate in a mail out survey. The final response rate was 66.4%. Women who served in Vietnam were grouped according to exposure to sexual harassment (none, low, medium and high) and compared to women who did not serve in Vietnam. All analyses controlled for education and age. Additional analyses were conducted to establish how sexual harassment might interact with extreme work stress and decisional conflict in determining PTSD. An analysis was also conducted to establish whether the relationship between sexual harassment and poorer health was due to sexual harassment per se or whether it was a function of the relationship between sexual harassment and PTSD.

Results: Exposure to higher levels of sexual harassment was associated with higher rates of drug and alcohol problems, worse scores on most SF-36 physical health scales (role-physical, bodily pain and general health) and higher rates of physical symptoms (fatigue, cold, aches and skin). Exposure to high levels of sexual harassment was also associated with worse scores on all SF-36 mental health scales and on all PERI scales. Rates of PTSD, nervous breakdowns, use of psychiatric services and psychiatric hospitalization were significantly higher among women exposed to high levels of sexual harassment. The likelihood that exposure to sexual harassment would result in PTSD was greatly exacerbated among women who were also exposed to high levels of work stress and decisional conflict. PTSD met the criteria for meditating the relationship between sexual harassment and most health outcomes however it only completely mediated the relationships with mental health service utilization and having a nervous breakdown. Sexual harassment remained significant for all other health outcomes.

Conclusions: Our data indicate that young women exposed to sexual harassment while in military service may be affected for the rest of their lives. The results suggest that sexual harassment is one of the most pathogenic stressors experienced women who served in the Vietnam War and that the physical and mental impact of military service in a war zone on women could be considerably reduced by measures to prevent sexual harassment.

WeW01:3 Health and Violence at Work against Women: National Data in France

Marie-Josèpe Saurel-Cubizolles⁽¹⁾, Marie-Josèpe Saurel-Cubizolles (1), D Fougeyrollas-Schwebel (2) R Camard (1), and the Enveff group (3)

Institut national de la santé et de la reherche mèdicale⁽¹⁾, Villfjuir Cedes, France, INSERM Unit 149 3) The Enveff group incluees: Elizabeth Brown, Stephanie Condon, Jean-Marie Firdion, Dominique Fougoyrollas-Schwebel, Annik Houel, Maryse, Jaspard, Brigitte Homond, Florence Maillochon, Marie-Josèpe Saurel-Cubizolles, Marie-Ange Schiltz.

Context: Violence and aggression or abusive behaviour is an increasing concern at the workplace. Despite a high number of recent publications and attempts at official regulation, we lacked data about the prevalence of violence at work and on its incidence on the health of workers. The purpose of this paper is to show the frequency of psychological, physical or sexual violence against women at work, to describe the main working situation related to a higher prevalence of violence and to analyse their incidence on health.

Population and Methods: Data was obtained from a national survey, carried out during the spring of 2000. The data collection was performed by phone at home and the random sample includes 6970 women, 20 to 59 years old, The questionnaire was specially prepared for this survey;

it comprised 13 different questions on violence at work occurring during the previous 12 month: bullying, exclusion, unjustified devaluation of work, insults, physical assaults, work destruction, death threats, sexual harassment's, rape or rape attempts. The health conditions was measured by various standardised questions, mainly focused on mental health, such as the General Health Questionnaire in 12 items, symptoms related to post-traumatic stress, psychotropic drugs, suicide attempts and leave on health grounds. Questions on health were asked before the questions on violence.

Results: Among 4756 women who had a job during the reference period, 7% reported a high level and 15% a moderate level of psychological violence; 2% had been subjected to violence of physical or sexual nature during the previous 12 month. Women reporting psychological violence had a higher prevalence of depressive symptoms and stress symptoms; they used psychotropic drugs more frequently and had more often at least one sick leave. The percentage of suicide attempts was also higher. These differences were significant after adjustment for age, marital status and socio-economic level indicators. Similar differences with non victims were observed between women reporting either physical or sexual violence.

Conclusion: The impact of violence at works is strong on health. Such data brings new information on a subject that is little investigated in France. It suggests the need for closer attention – from social actors to researchers – to the design of work systems and work organisation shown to be a cause of the occurrence of violence between individuals.

WeW01:4 Some Types of Aggressions Suffered by Workers at Obstetric Clinic

Sarita B. Vieira and Edith Seligmann Vieira (Psychology Department / Federal University of Paraíba (UFPB/ JP/PB/Brasil and Fundação Getúlio Vargas/ FGV/ SP/ Brasil

Aims:

The present study is concerned with Mental Health at the Workplace. The question of psychic suffering and pleasure at an obstetric clinic is studied here. A further and lesser-studied source of suffering was identified, which is the female workers exposure to different forms of violence at the workplace.

Methods:

The major theoretical-methodological support was the Psychodynamics of Work whose central issue is the attempt to understand how individuals manage to resist to the pressures they suffer at the workplace. We chose the qualitative approach for data collecting, semi-structured interviews, collective (10) and individual (03), as well as the observation of the work routine in the sector. 36 professionals participated in the interviews: male and female doctors, female nurses, assistant nurses and members of the supporting staff. The sample included male (8,33%) and female (91,66%) subjects.

Results:

A structural aspect was identified at first: the issue of multiple jobs held by health professionals constitutes an important source of suffering when it is associated to the intensity of the activities carried out, to the work conditions and to the life styles led by these workers, namely the women.

As to the exposure of female workers to certain physical and mental hazards such types of aggressions as verbal and non-verbal aggressions, and even physical aggression were identified. Inter-professional relationships can be a source of pleasure, but it can also be a source of psychic suffering. This also applies to the interchanges with patients, with the newly born and their families. The nurses and the assistant nurses, due to the very nature of their activities, are an easy target to aggressions mainly at moments of great anxiety and tension. Reports collected confirm this vulnerability. Verbal and non-verbal aggressions exist but one can hardly assess the psychological damage they cause for the victims would rather silence about them. As a result their marks linger for a long time. These types of violence directly interfere with the psychic mobilization through which the affective dimension of work is expressed and under which psychic balance and social identity is built.

Conclusion:

We realized the importance of the social systems of defense one can resort to in order to help the female workers escape from the anxiety, guilt, doubt and uncertainty they face. One of the great challenges of the work at a hospital is the fact that the object of such work is a human being. It goes without saying that hospital work has an extra dimension besides its technical aspects, which is the relational and affectional dimension. Consequently, affectivity plays an important role in the well being of female health workers. This will be reflected in the quality of the assistance they provide to the community.

WeW01:5 Precocious Work of Boys and Girls Under Street Condition: Suffering and Discrimination

Maria De Fatima Alberto Federal University of Paraíba, Brazil

This article aims at presenting a micro-social study-- developed in the Ph. D program in sociology-- on the precocious work of both children and adolescents under street condition in casual activities in the city of João Pessoa (North east of Brazil).

Through the analysis of the working activity, we have obtained elements for the understanding of the constitution involving working function, as well as the oppressions and repercussions of these elements in the body and mind. For this, Ergonomics and Psycho-dynamics in work were employed.

The insertion of precocious working boys and girls in the streets, as street peddlers, is not homogeneous, it follows a social hierarchy between boys and girl. This constitutes peculiarities in the *social relationships involving sex and sexual working division*. The girls are bound to do work is hierarchically inferior. On the other hand, boys are bound to do work that requires strength and "astuteness".

One realizes that according to what has been studied, boys are inserted in working activities which are socially accepted – vendors and car washers; while girls do activities which are not inserted according to social or moral aspects or even the ones which typically belong to women: prostitution and vendors of fast, cheap food (quentinhas). Their work activities is like a continuity of the role the woman plays in the family and of whatever is consecrated to women in the sexual

division of work. Girls prefer hidden places, the so called meeting places for prostitution, as if they were objects to be chosen according the customers' preference. They think that their working place in the street (a public area) presents both a negative aspect and a certain vulgarity as well.

Regarding the working day, there is also a difference. Boys work only in the streets for ten or fourteen hours or so. Girls work in the street for four or eight hours also having to do the housework. Boys are requested to use their body, their strength and also to carry weight and hold heavy things; girls, on the other hand, use their body as a propaganda object or as a source of pleasure for customers.

Both boys' and girls' work present risks for health, as they are subject to violence in the street. But there are also risks characterizing activities, which show the difference between boys and girls. Boys are subject to risk related to carrying weight and also to their posture, while girls are more susceptible to impertinent sexual court, constraint, and sexually transmitted disease.

The precocious insertion along with their life under street condition is disastrous in the life of those children and adolescents. The following aspects show this: a negative image about oneself, a low self esteem, precocious adult behaviour, delay in the school learning process, social deviation and lack of future perspective. These aspects act for boys and girls in a different way.

WeW02: Work and Family Life Balance: Total Burden

WeW02: 2 Women and Work in Dual-earner Families: An Indian Experience

Susmita Mukhopadhyay Indian Statistical Institute, Calcutta, India

The present study aims at examining possible variations in respect of selected life style related factors such as career salience, job satisfaction, multiple role stress and health in relation to gender and age among a group of middle class dual-earner couples inhabiting Calcutta city.

Two hundred and four dual-earner couples aged 21-65 years engaged in out- of-home jobs were selected randomly. Quantitative data were gathered concerning the aspects under study through standard questionnaires.

Findings of the study reveal no significant gender difference in perceived career salience in the study population. Further, male-female differences are generally observed in stress experienced in performing different roles simultaneously. Gender differences mostly have not been found to occur in respect of health status as measured by General Health Questionnaire. Significant age difference exists in case of multiple role stress (e.g. caring of elders) among both the genders and in case of mental health (level of depression) in case of males only. The implications of the results concerning professional and family life as well as mental and physical aspects of health in terms of specific coping scenario for the Calcutta dual-earner couples are discussed.

WeW02: 3 Affects of complex everyday Pattern of Activities on Dual Working Mother's self-perceived Well-Being and Health

Lena-Karin Erlandsson, Mona Eklund Reg. OT

Abstract: it is hypothesized that one reason why women have a higher sickness absence and higher health service consumption, when compared to men, is that women have several different roles and chores at home as well as at work. One consequence of this is that women have a more complex pattern of activities than men. A pattern of activities consists of three types of activities; main activities, hidden activities, and unexpected activities, which intertwine and form the daily activity pattern. Our study focuses on the stress-related consequences of women's two-edged burden of employed work and household work, taking into consideration the complexity of the patterns regarding the blend of activities, as well as the experiences of participating in them. We highlight the specific aspects of hassles and uplifts and the presence of unexpected occupations.

The aim is to investigate what kind of experiences women with a complex life situation, including remunerative work and young children, perceive as hassling and uplifting. Further, to determine if, and to what extent, the degree of complexity in the everyday pattern of activities affects women's self-perceived health and well-being.

One hundred working and married mothers with pre-school children were interviewed. Both qualitative and qualitative data analyses were made. The study showed that the main sources of hassles in the everyday patterns of activities are work and the household. The uplifting experiences were generated mainly from participating in certain positive occupations and from being with the children. In the presentation will also be discussed how unexpected activities influence women's daily lives and experience of health.

The project has relevance to the overall knowledge about women's health and, by generating a better understanding and interpretation of patterns of daily activities, it can serve as a basis for new and supplemental methods for interventions for women who experience stress and ill-health related to their everyday life.

WeW02: 4 Antecedents and consequences of work-family conflict

Nicole Jansen, IJmert Kant Department of Epidemiology, Maastricht University, Maastricht, The Netherlands

Objectives:

- (1) To study risk factors in the onset of work-family conflict after one-year follow-up for men and women separately;
- (2) To study whether work-family conflict constitutes a risk factor in the onset of need for recovery after work and prolonged fatigue after one-year follow-up for men and women separately.

Methods:

The study is part of the prospective Maastricht Cohort Study on 'Fatigue at Work' in which 12,140 employees was followed for 3 years by means of 9 self-administered questionnaires. For the present study, the first 2-year of follow-up were used. Work-family conflict was measured by a single item asking employees if they were able to adequately combine work and family life. Different antecedents of work-family conflict, such as work-related, non work-related factors and individual characteristics were taken into consideration. The outcome measures need for recovery, representing short-term effects of a day of work, and prolonged fatigue were measured by the scale Need for Recovery from a Dutch questionnaire on the Experience and Assessment of Work (VBBA) and the Checklist Individual Strength respectively. Cox's regression analyses were used to evaluate the relative risks (RR) associated with antecedents and consequences of work-family conflict.

Results:

11% of the male and 8% of the female employees reported work-family conflict. Examples of risk factors for work-family conflict one year later were high psychological job demands (RR 1.69 CI 1.25-2.29 for men; RR 2.16 CI 2.16 CI 1.13-4.10), overtime work (RR 1.04 CI 0.81-1.33 for men; RR 1.96 CI 1.14-3.37 for women) and type of work schedule (shift- vs daywork) (RR 1.99 CI 1.54-2.58 for men; RR 1.11 CI 0.58-2.11 for women). Especially in men, having flexible working hours (RR 0.63 CI 0.49-0.80) showed a protective effect on work-family conflict.

Work-family conflict itself has important consequences and proved to be a strong risk factor for the development of need for recovery after work (RR 1.55 CI 1.11-2.15 for men; RR 2.04 CI 1.14-3.68 for women) and prolonged fatigue (RR 1.81 CI 1.42-2.31 for men; RR 1.65 CI 0.98-2.79 for women) one year later.

Conclusions:

Clear risk factors for developing work-family conflict were observed. In addition, work-family conflict constituted an important risk factor in the onset of an elevated need for recovery after work and the development of prolonged fatigue. In studying both antecedents and consequences of work-family conflict strong gender differences were found.

WeW02: 5 Work and Family among Various Earnertypes in the Netherlands 2)

Karen van Rijswijk) Karen van Rijswijk, Marrie H.J. Bekker and Christel G Rutte, Tilbury University and Eindhoven Technical University, the Netherlands

The growing participation of women in the paid-labour market, coinciding with increasing possibilities for working reduced hours, has led to a diversity in wage-earner types. The present study investigated whether men and women among different wage-earner types experience different levels of home-demands, work-demands, work-and-family-interference, emotional exhaustion and cognitive failures.

Participants were 128 male and female administrative employees in two insurance companies in the Netherlands. They were divided into four wage-earner types based on their and their partner's number of paid labour hours. We distinguished the single-wage-earner type (only one partner has paid work). The double-wage-earner type (both partners work full-time), the large-wage-earner type (one partner works full-time and the other has a large (16-32 hours a week) part-time job) and the small-wage-earner type (one partner works full-time and the other has a small (less than 16 hours a week) part-time job). Questionnaires were administered measuring work demands, home-demands, home-and-family-interference, emotional exhaustion and cognitive functioning. The results showed that, across all wage-earner types, men spend an equal amount of time on both paid-and unpaidlabour tasks. Compared to women in the large and small-wage-earner type the women in the double-wage-earner type spent the largest amount of time on paid-labour. Strikingly, we found that the women among all wage-earner types spent an approximately equal number of hours on unpaidlabour. Partly in accordance with expectations, women in the double-wage-earner type reported the highest level of work-and family interference, emotional exhaustion and home-demands, but the lowest level of cognitive failures. Men in the large-wage-earner type reported the highest level of cognitive failures and home-demands, but also the lowest level of emotional exhaustion and workand-family interference. Furthermore, we found that perceived work-and-family interference acted as a perfect mediator between working part-time or full-time and perceived emotional exhaustion. It is concluded that men and women among the various wage-earner types experience different levels of home-demands, work- and family interference, emotional exhaustion and cognitive failures. Theoretical and practical implications will be discussed.

WeW03: Occupational Health and Safety, Working Conditions and Environment

WeW03: 2 Occupational Health and Safety Working Conditions and Environment

Dorothy Miriam Chirewa Public National Social Security Authority , Harare Zimbabwe

Aim: The aim of the study was to assess the occupational hazards which women are exposed to in agriculture over the past three years.

Most Women are seasonal workers who are hired for weeding, applying chemicals, cotton picking, sorting tobacco and in the horticulture industry. Workers are also exposed to all types of claimant weather and in addition women work with babies on their backs.

Method of the Study, Area of Study: Tobacco farms, cotton farms and horticulture areas in and around Harare.

To date I have used secondary data by National Social Security Authority Statistics department on occupational accidents in Zimbabwe. I have also done random visits to assess the type of work women are involved in.

I intend to use observational guides and interview female workers since there is high illiteracy on farms. Out of 75 farms around Harare, I intend to visit 20 farms.

Results: According to the Statistics collected over the past three years 1998-2000, the following accidents ere reported in the agriculture sector.

Year	Injured Female Workers	Total in the Sector	Overall in all Sectors
1998	352	2443	18107
1999	231	1985	15575
2000	238	1721	14174

Conclusion: Most female workers in the agriculture sector are exposed to less physical hazards than men and most of them are seasonal workers as such there is need for further study in this area.

WeW03: 3 Public of Private Sector of Health Care Work - Consequences of Gendered Career Preferences

Ann Öhman 1), Hans Stenlund 1, Lars Dahlgren 2)

- 1) Dept of Community medicine and rehabilitation, Physiotherapy, Umeå University
- 2) Dept of Public Health and clinical medicine, Epidemiology, Umeå University

Aim: The aim was to identify reasons for the career choice and professional preferences among students enrolled in the Swedish physiotherapy education.

Method: The study design was longitudinal and used a questionnaire administered to a cohort of 273 students in the beginning of the University programme in 1997 as well as at the completion of the programme in 1999, yielding a response rate of 93%. Data were analysed with factor analysis and univariate and multivariate logistic regression analysis. To test the relationship between the

factors and outcomes that showed significant effect in the logistic regression analysis, a path analysis was performed.

Results: The two most preferred health care facilities after graduation were sports medicine clinics and fitness centres. Future work in private practice was highly endorsed by a majority of students. Health promotion was highly valued. Care of elderly and hospital work were not preferred. Significant differences between men and women appeared. Men were more likely to have chosen the programme because of their interest in sports and physical activity. Men were also more choice decided about future professional activities, whereas women were more open for several areas of practice. Men preferred to become the owner of a private clinic and to work with alternative approaches to health care, such as fitness training in sports medicine clinics.

Conclusions- The results reveal that gendered career preferences exist during health science education. Women physiotherapists will presumably become more exposed to work in the public sector of health care, a sector that creates increasing ill-health problems and long-term sickness absence among its employees, whereas men will chose well paid jobs in the private sector. It is therefore important that the educational health programmes address issues about gendered power relations and hierarchies in working life in the curriculum.

WeW03: 4 Gender differences in organisations with several formal prerequisites for equality between the sexes

Yvonne Liljeholm Johansson, Töres Theorell The Unit for Social Environment and Health, Stockholm

Studying working life in a gender perspective it is productive to study orchestras and Orchestra musicians as several formal prerequisites for equality between the sexes in the organisations are met. The employment process of musicians is performed as auditions behind a screen and the only interesting criteria are quality and skilful performance of the work task.

Working tasks are also very well defined and apparently identical for women and men as everybody has his/her specific place in the Orchestra playing the music noted. A third party, the conductor, decides how to perform the task.

We have studied 12 professional Swedish orchestras by means of questionnaires to half of the musicians (320) in the orchestras, four symphony orchestras, three opera and musical orchestras and 5 chamber orchestras. Sampling parameters where sex and time of employment and the response rate was 78 percent. Amongst the 250 that responded 37 percent were women. The group of women had a higher response rate (84%) than men (74%).

In spite of these formal prerequisites of equality preliminary results show significant differences between the sexes regarding hierarchical positions, doubts in own competence and in different health aspects, all disfavouring women. Differences in health aspects were headache ($F_{1,235}$, 275 p= ,00 1), muscular pain ($F_{1,240}$, 10,72 p= ,00 1), musculoskeletal symptoms ($F_{1,233}$, 4,47 p= 036), difficulty in falling asleep ($F_{1,239}$, 4,65 p=, 032), insomnia

(F $_{1,239}$, 3,75 p=, 054), nervousness/anxiety (F $_{1,240}$, 13,47 p=, 000), depression (F $_{1,240}$, 9,48 p=, 002) and irritation (F $_{1,240}$, 12,64 p=, 000). More women (48 %) than men (38 %) had problems in their auditory organs. Most problems were found in orchestras playing opera and musicals. In these orchestras 75 percent of the women and 53 percent of the men had problems in their auditory organs. The highest position in the orchestras is the player in leading position (the leader) in each

instrument group. This position was to 80 percent taken by men (only to 20 percent by women). Coleaders were 72 percent men (and 28 percent women) while tutti musicians had a totally balanced distribution (50 percent men). Women were also to a higher degree affected by various symptoms and doubted their capacity more frequently. Noticeable was also the difference between men and women regarding the distribution of age, 18 percent of the men were older than 50 years in comparison with only 3 percent of the women.

This is quite remarkable especially in view of the new Swedish pension system based on a working life lasting for forty years. There are reasons for studying more closely whether the above mentioned differences between the sexes is powered by high qualificational demands, lowered motivation, psychological or physical problems or structural patterns in the organisations and in society. An aspect regarding the measures to be taken to deal with these problems, both regarding structural and health aspects is that women and men might well need different kinds of support and measures of intervention. These qualitative issues have to be pondered with a high degree of contextual sensitivity and openness to different approaches for men and women even if some problems seem similar at a first glance.

Our aim was not primarily to study these issues from a gender perspective. The aim was to identify structures and phenomena for professional excellence within work groups. The study sprung from the hypothesis that high quality in the work task is connected with good psychosocial working climate and employee wellbeing. During the process of research surprising results surfaced concerning differences between the sexes in the organisations studied. We believe it is purposeful to share and discuss these findings with the scientific community.

WeW03: 5 Association Occupational and non Occupational Factors with Menstrual Pain and Cycle Disturbances

Teresa Makowiec-Dabrowska, Wojciech Hanke, Elzbieta Sprusinska, Zyta Radwan-Wodarczyk, Wiesawa Koszada-Wodarczyk Institute of Occupational Medicine, Lodz, Poland

Perimenstrual symptoms and disturbances of menstrual cycle are the most common disorders of women, but occupational physicians in our country pay not enough attention for this problem. In this study we examined the effects of work condition on work-posts typical for women on menstrual functions. The group under study consisted with 142 women, aged 22-45 years, employed at hospitals (72 women), bank (32 women) and cosmetics productions (38 women).

We found that only 20 % of women had experienced no symptoms before and 34% during their last menstrual period. Using logistic regression we found that premenstrual symptoms was significantly related to working at night shift (OR=3.3, 95%CI 0.8–12.9) and several parameters connected with personal characteristics, as age (OR=1.2, 95%CI 1.0–1.3), chronic illness' (OR=1.2, 95%CI 1.0–1.5), alcohol consumption (OR=2.2, 95%CI 1.0–5.1) and household duties (OR=2.6, 95%CI 1.2–5.7). Prevalence of symptoms of dysmenorrhea was significantly greater among women working on rotating shift work (OR=3.8, 95%CI 1.0–14.4), reported strenuous work activity (OR=2.6, 95%CI 0.9–7.4), exposed to desinfectants (OR=3.6, 95%CI 1.0–12.5) and significantly lower among women using contraceptive pills (OR=0.3, 95%CI 0.1–1.2). Moreover we found that contact with ethylene oxide may create the risk of irregular cycles (OR=9.0, 95%CI 0.8–97.1) and

oligomenorrhea (OR=6.1, 95%CI 0.7–51.4), and work in RTG units – the risk of long cycles (OR=4.4, 95%CI 1.1–16.8) and heavy menstrual bleeding (OR=4.8, 95%CI 1.2–19.8).

33 women from this group recorded their basal body temperature for a 2-month period. We found that risk of anovulatory cycles was raised among women reporting high level of work stress (OR=6.5, 95%CI 0.4–95.5) and working on rotating shift work (OR=12.0, 95%CI 0.8–184.5).

The data obtained during this project was utilized to prepare guideline for occupational physicians concerning the prevention of disturbances of menstrual cycle among working women.

WeW04:Improvement of Working Conditions

WeW04:2 Evaluation of a Project on Health, Work Life, and Women's Life

Hans Brunnberg, Marianne Parmsund, Inga-Lill Pettersson Dept of Occupational Health, Norrbacka, Stockholm

The Swedish National Institute of Public Health initiated a 3 year project with the intention to develop and apply methods to improve health of women working in the health care sector in five counties of Sweden. Altogether 850 women took part in different activities.

The aim of this study is to evaluate this project. The evaluation involved four parts: The motives for taking part in the project, the ongoing processes, effects on health and wellbeing as well as on organisational improvements and enduring improvements in work places. The motives were studied by interviews and questionnaires directed to politicians and top management. The process was described by interviews with women's groups as well as with project and group leaders. Effects were measured by questionnaires to all women taking part.

The aim and activities of local project had to be formulated within a frame of four key concepts: Health, Empowerment, the Work place as an arena and Genus. These concepts were broad and resulted in a great variety of applications. The results show that a variety of methods and activities had been used in the local project. The motives on the top level were mostly abstract and unprecise. Improvement strategies varied from physical training to organisational improvements.

The intention of using empowerment as an idea in the project resulted in a vague frame and confusions about aims and methods in order to improve health. The evaluation effects were few for the total group, but more evident on local project level, improvements were few on health and wellbeing but more evident on perceived work environment.

In only a few local projects has decisions to continue been taken. The evaluation pointed at the difficulty to anchor ideas on the top level, and that frames must be well defined. Organisational improvements are easier to reach in this type of project while health improvements should take more than 3 years.

WeW04:3 Load reducing configuration of the working time in retail stores

Gert Zülch, Thomas Bogus, Regina Halmer Ifab-Institute of Human and Industrial Engineering of the University of Karlsruhe, Germany

1. Problem

Due to mounting competitiveness as well as the modifications to the German retail closing time laws new forms of work organization and, in particular, new working time models are being implemented in many retail stores. These changes have a great impact on the working conditions as well as on the strain of the personnel, which is comprised of 60 % women in Germany. The goal of the research project "Effects of flexible working time models on the personnel employment and the strain on the personnel - FAZEM", which is promoted by the Ministry for Education and Research, is first of all the analysis of the load and strain on the personnel in retail trade (focusing on the textile stores and on warehouses), which have been created through the implementation of flexible

working time models and forms of work organization. A further goal is to derive strain-reducing recommendations for the configuration of working times from the determined strains and loads.

2. Procedure

The procedures for the determination of load reducing working time recommendations are two-fold. First the existing strain and load are determined. An objective work analysis, using the Activity Assessment System (Tätigkeitsbewertungssystem) TBS, will be carried out within the retail stores cooperating in the FAZEM project. For this, activity profiles will be built in order to represent the strain related to the activities, which are assigned to the employees. Among these, typical activity profiles for women are built up. In order to register the subjective load perception, employee questioning, using the Work Psychological Work Analysis Procedure SALSA (Salutogenetische Subjektive Arbeitsanalyse), will be carried out. In this way the subjective load perception of more than 200 employees will be registered. In order to be able to derive casual relationships between working time models and strain and/or load the SALSA questionnaire will be completed with questions about the working time model in question.

Furthermore, a personnel-orientated simulation study was conceived and realized, with whose help working time models can be systematically varied and thus their effects on not only the enterprise, but in particular on the load-orientated goal criteria can be examined prior to their implementation. Configuration recommendations and guidelines for the implementation of working time models, which should guarantee a lower possible load level for the workers as well as a better fulfilment of customer and supplier requests, should be derived from the simulation results.

3. Results

Correlation and analyses of variance will be carried out for the complete survey of registered loads in order to find evidence of load focuses or changes resulting from a certain working time model. An emphasis is placed in particular on the load upon women, who aside from work, are strained much more by family obligations. Furthermore, the recorded loads and stresses will be compared between the genders. Recommendations for the configuration of working time models in retail stores will be derived from the results and presented. In addition, the results of the systematic simulation study will also be presented. The load-orientated goal criteria degree of fatigue and time stress will be integrated in a simulation procedure in order to be able to predict load caused by a certain working time model. Conclusions about working time models with the lowest possible load will be drawn from the combination of results from the work analysis and the simulation study. Thereby, particular attention will be paid to general conditions specific to women.

WeW04:4 The Women In The World Of Tobacco. Safety And Health System

Alvarez Tellechea Mileidys) Research Institute of Tobacco, Havana, Cuba

Aim.

The tobacco industry of Cuba is one of the economy most important product in our country. Nowadays the production of tobacco in safety conditions is an essential requirement in the world market. My objective in this work is based to design a safety and health system in order to improve the working conditions, mainly for women.

Method:

After I have made the analysis and assessment of risks at women's working place we got some evidences which show us that women are exposured to different factors of risk, such as: stress, noise, chemical and biological agents, ergonomical factors, repetitive work and others, it expose that in a long period it could be very dangerous for them, and it cause some disabilities and diseases, ex: musculoskeletal disorders, mental fatigue, reproductive health, arterial hypertension, etc. Finally we designed an integrative system, which show us the solutions to follow up step by step in order to achievement our goal, it include: strategies and methods for prevention, integrative mechanisms, monitoring and surveillance of working conditions, stimulation mechanisms, etc.

Main results:

Our most important result is the implementation of a safety and health system which include different actions to follow up for development of a healthy community at work and allow us improving the working conditions and avoiding the negative consequences for women's health, caused by an inadequate work organisation and unsafe work environment.

Conclusion

The improving of working conditions have a positive repercussion in the family life balance of women, which made possible to increase the production, productivity and quality at work.

WeW04:5 Solve addressing psycho-social problems at work

Karin Håkansta ILO Safework, Geneva, Switzerland

Stress, alcohol and drugs, violence (both physical and psychological), HIV/AIDS and tobacco all lead to health-related problems for the worker and lower productivity for the enterprise. Taken together they represent a major cause of accidents, fatal injuries, disease and absenteeism at work in both industrialized and developing countries. These problems may emerge due to the interaction between home and work, they may start at work and be carried home (or outside work) or vice versa.

To address these problems at the enterprise level, a comprehensive policy should be put into place. Apart from day-to-day operational issues, an enterprise policy should address occupational safety and health needs including psycho-social problems. Traditional approaches have neither addressed the policy requirements nor action required in reducing the negative impact of psychosocial problems.

In response to this situation, the International Labour Organization has developed a new concept called SOLVE, which allows an organization or an enterprise to integrate psycho-social issues into overall enterprise policy and establish a framework for preventative action. SOLVE introduces an innovative approach whereby workers' health, safety and well being become integral parts of the economic sustainability and organizational development of enterprises. By directly linking health and safety issues with managerial and developmental issues, such as quality, reliability, client satisfaction, workers commitment and productivity, the course offers the tools for immediate, self-sustained action at the workplace to reduce and eliminate these problems.

WeW04:6 Gender and Employment Promotion in Vietnam

Nguyen Thi Dieu Hong

Department of Labour and Employment Policy, Hanoi, Vietnam,

Like many countries in this region, the majority of women in Vietnam live in rural areas. In 1998 75.6% of working age women were in the agricultural workforce, compared to 71.6% of men. Women workers in Vietnam are dominant in hotels, restaurants, and textile and garment manufacturing where they are the majority of workers and run 80% of the businesses. In addition they are the main carers in the family and the organizers of the rural household. Furthermore, female workers in Vietnam receive less remuneration for their work, earning an average of US\$32 per month compared to US\$41 for men, a 14% reduction.

Vietnam is also undergoing a transition from a centrally planned to a market economy. It has experienced a fall in women's labour force participation, as well as fewer communal childcare and other facilities being provided. Some women are working longer hours in order to compensate for the State's inability to pay for their children's education. Many women have to work longer or have more than one job in order to support their families. Increasing levels of unemployment have often placed additional pressure on women to perform lowly paid work in unhealthy and unsafe conditions.

According to the results of VLSS2, women's labour dominates the textiles and garments industry (77%), hotel and tourism (70.9%), sales (66.8%), and food processing (54.1%). Women also comprise 53.1% of the labour force in agriculture. Men's labour is dominant in construction (91.6%), communications, including transport (90.7%), mining (73.9%), electronics (65.8%) and light industry (63.6%). Of the more than 40 million workers in Vietnam, 80% are living in rural areas.

Slightly more women than men are employed in SOEs and government social services such as teaching, nursing and social care. This will have implications for female labour as the SOE equitisation program continues and there are further reductions in the size of the public sector.

The type and quality of jobs offered to women are often unskilled or semi-skilled jobs at the lower end of the production process, with little prospect of upgrading. Women are less likely to receive further training than are men, partly because their job tenure is interrupted by the demands of childcare.

Based on the results of VLSS2 Job Survey, the wage compensation levels for female workers have remained below those of male workers in the formal sector. Average female wages being between 25-30% less than male workers.

Slow economic growth, economic restructuring, and structural adjustment are among the reasons for high unemployment in many developing countries. The unemployment rate for women in Vietnam has increased from 5.38% in 1996 to 7.42% in 1999, due mostly to the impact of the regional economic crisis.

There is gender division of responsibilities between men and women for childcare, and the consequent effect on women not being able to look for work. Men were also more likely to be studying (44% of respondents), than women (25%).

Female workers in Vietnam are clearly engaged in the majority of household work.

The VLSS2 data shows the discrepancy between the number of hours women spend doing household jobs compared to men. It is not until men are aged over 66 that the household jobs are shared more equally.

In Vietnam, as in other economies in transition, there is a danger that the effects of economic adjustment will cause employment and social security programs to lose ground, especially in the areas most affecting working women- child-raising facilities, health care and old-age pensions. Female workers also bear the burden of most of the caring required for elderly family members. Further equitisation of SOEs will increase the levels of urban unemployment for both men and women.

There are many root causes of gender discrimination and the vulnerability of women lie outside the labour market. They stem from social perceptions and norms which affect women's opportunities in all spheres at home and at work. There is often a difference between the actual abilities of women and men, and the opinions and norms about what they can or are allowed to do. This often leads to discriminatory hiring and pay practices, misguided public policies and low levels of self-esteem of women. Gender inequality among workers has a material and ideological dimension, and both of these need to be addressed to effect change.

Three crucial linkages need to be made when improving the situation of women in the world of work:

The linkage between the care economy and paid work. A better distribution of care work is needed to achieve gender equality in paid work. The care economy includes the overall majority of unpaid work of women, and the public and private provision of social services. Women are hampered in finding paid jobs because of their family responsibilities. Women, who earn income often face the double workload. The results of studies done on housework indicate the common tendencies of gender division of labour within family. In most cases, wives mainly do the housework. The family division of labour between the wife and husband depends on the type of jobs and occupations they and their family members are engaged in.

Economic crises, transitions or reforms often limit the provision of public social services which then need to be taken care of by women. This is particularly harmful to women in poverty. The transition from a centrally planned economy to one more closely linked to global and national markets has caused disruptive differences. The opening of the country to economic and social influences has brought in its wake the emergence of new forms and patterns of vulnerability for Vietnam's women.

The linkage between the formal and informal sector. The informal sector is growing in Vietnam . It consists of (i) the traditional "informal" sector where workers who cannot find a formal sector job engage in usually low-skill and low productive activities and (ii) work which is outsourced by formal sector firms to workers in enterprises and workshops and to home workers. Most of the job growth is in the informal sector and the proportion of women working in the informal sector is usually higher than the proportion of men. The vast majority of jobs in the informal sector are precarious, vulnerable and of low quality. Social protection policies can help to minimize the gap between rich and poor as the country reforms its economic systems. The effects of renovation on female workers must be considered in the context of social policy development to ensure that women continue to have a positive role and opportunity to develop the social and labour conditions within Vietnam.

The linkage between quantity and quality of employment and social protection. Micro or small-businesses, the informal sector, home work, domestic service and migrant labour, all sectors where women predominate or are heavily represented, are often outside the scope of traditional labour and social protection. The quality of work is often below standard in terms of working hours or minimum safety provisions. Social security schemes are non-existent and the workers are not organized. Moreover, women are also underrepresented in the vocational training and education

sector. Poor qualifications and low skill levels for women labourers are serious obstacles to the improvement of women's role and position in the economic and social spheres. Specific measures are required to prevent girls and women in Vietnam from falling further behind.

Strategies for providing better jobs to women usually need to be comprehensive in nature and include integrated strategies in the fields of policy reform, legislative action, labour market information, employment promotion and social protection.

Rights in law need to be implemented in practice. Even where national laws provide equality for women and men, obstacles exist due to a combination of factors such as: lack of awareness among men and women, cultural resistance, traditional, practices, lack of political commitment, and inefficiency of enforcement mechanisms. Additional action needs to be taken. Key tools for promoting women workers' rights are law enforcement mechanisms, information dissemination and training on women workers' rights among all workers and employers.

Both women and men need productive work which earns them an income for decent living of themselves and their families. Gender-sensitive labour market policies need to be designed to help women improve their labour market position. Practical measures are needed in the fields of

providing equal opportunities in wage and self-employment and integrating a gender dimension in poverty eradication. Like many countries in this region, the majority of women in Vietnam live in rural areas. In 1998 75.6% of working age women were in the agricultural workforce, compared to 71.6% of men. Women workers in Vietnam are dominant in hotels, restaurants, and textile and garment manufacturing where they are the majority of workers and run 80% of the businesses. In addition they are the main carers in the family and the organizers of the rural household. Furthermore, female workers in Vietnam receive less remuneration for their work, earning an average of US\$32 per month compared to US\$41 for men, a 14% reduction.

References

General Statistics Office (1999) Statistical Abstract Vietnam Living Standards Survey 1997-98 Hanoi, November, 1999

International Labour Organisation, Bureau for Gender Equality (2000) Decent Work for Women. Geneva. May 2000

International Labour Organisation Training Systems and Policy Branch (1998) Gender Guidelines for Employment and Skills Training. Geneva. March 1998

International Labour Organisation (2000) World Labour Report Geneva May 2000

MoLISA (1999) Statistics on Social Safety Net in Vietnam. Labour and Social Affairs Publishing House, Hanoi, November 1999

NCFAW (2000) Implementation of Beijing Platform for Action in Vietnam. Hanoi, June 2000 United Nations (1999) - ACC Task Force on Full Employment and Sustainable Livelihoods, Synthesis report

Tran Thi Van Anh/Le Ngoc Hung (2000) Women and Doi Moi in Vietnam.

Seminar material Better jobs and Social Protection for Women Workers in the context of Renovation, Hanoi 12 - 14 July 2000.

WeW05: Agents and Activist for Change: Unions

WeW05: 1Challenges Faced by a Woman Worker and Candidate in the Trade Union

Caroline W. Ng'ang'a National Banking Insurance & Finance Union (k) Kenya

Introduction: There is a lot of material on equalities of a good man or woman leader.

When a woman is employed she encounters violation of her rights and those of others and subsequently the need to safeguard those rights become inevitable.

It is therefore necessary to identify the hurdles hindering as many women as men from taking up leadership positions the Trade Union movement in Kenya and also find field out why the hurdles exist despite this awakening.

This paper will discuss:

- 1. The problems faced by the Kenyan woman worker in the Money Market Industry.
- 2. The reasons why there are very few women in the Kenyan Trade Union Leadership
- 3. The difficulties these women have in retaining their positions once they have been elected or even the possibilities of moving up the ladder.

Having addressed the problems the paper will attempt to come up with ways of dealing with the problems.

WeW05:2 "Women-Health-Work". An Experience of Trade Unions of Milano

Marina Finardi CISL, Milano

Trade unionists and experts in health and safety at work coming from private services and public local institutions (ASL) compose the group Donne-Salute-Lavoro (Women-Health-Work) of CGIL-CISL-UIL Milano, founded in 1996.

The Group started its activities after the transposition in Italy of the 89/391-framework directive with the aim of introducing a gender strategy in the new approach to working risks. A theoretical document, based on OCSE's report made by Elisabeth Lagerlof, containing draft projects of research and actions we were able to start with, was our first step. WMSDs, injuries with risks of biological infections, pregnancy were our initial targets of work. Now they include night shift work.

A synthetic view of our experience

To act on WMSDs we undertook, with high participation and cooperation of H&S worker's representatives, supported by Cemoc of Clinica del Lavoro of Milano, a research-intervention involving nine companies of various productive sectors. Our aim was to experiment an approach where worker's representatives provided with appropriate formation, light but proper instruments for the interventions (questionnaires on risks and on diseases), periodic checks and meetings (with us, their trade unionists and Cemoc), could be real actors of the whole process: starting with risk assessment and ending with solutions, equal opportunities included. So acting, we achieved the goal, while reducing existing risks. Denounces of professional diseases have been also made at the end of the process, by companies' doctors who firstly denied even the necessity of health

surveillance. In other words, workers representatives were able to involve and convince, without delegating, all the actors. The success of this experience (model for action, concrete achievements) was enough to convince social and institutional representatives to undertake now, with our participation, a similar but wider and more structurate project involving a great lot of Regione Lombardia's companies where risks are likely to be present. The experience has been published in the contest of a European project (in Italian language) and summarised (in English) in the TUTB book "Europe under strain".

As regards to injuries by syringes with possible consequences of infections we undertook a research in Milanese's hospitals in order to know how many accidents were registered where they were happened and to whom. The aim was to make evidence of the necessity of compulsory registration for these injuries, not due for law because they normally don't cause absence from work more than a day, pointing out that they occurs mostly to women, particularly in neglected areas of prevention. Following to it we produced a booklet on biological agents risks for diffusion in other still more neglected working sectors where the presence of women is normally high.

As to pregnancy we concentrate our efforts in producing instruments for a serious fulfillment of the specific European directive and its disputed guidelines. We worked on adequate guidelines, produced booklets and practical tools to make easier but proper risk assessment, and organized formation courses. We are now collecting information and studies on working risks concerning breastfeeding wishing to undertake actions for an almost neglected women and children right.

Last year, when night shift work was compulsory introduced in Italy for all women, we opened an intervention on health problems. After producing a leaflet on the new law with suggestions for bargaining inside and outside working places, we made up a questionnaire to identify risks and diseases. We are testing it now in some companies with the aim to undertake further actions. We are also following with interest European research on the subject (Danish and Dutch as far as we know).

In the course of those years (1997, 2001) we made two large meetings to present, discuss and share our job, objectives, results and instruments with workers' representatives and other experts plus social partners, etc. We act directly in Milan area only, but our work became known outside through contacts and requests of some cooperation by trade unions and institutions at regional, national, European level. What we find difficult is to induce concretely the start of similar interventions in other Italian areas.

Even if there is not enough time and energies to make a great lot of research and actions, and this is certainly our case, we think however that our experience is a demonstration of significant possibilities and opportunities to be considered by everyone: the growing up of a multidisciplinary group able to make concrete and participated interventions while researching, the evidence of the importance to pay attention to hidden women risk coming from the sexual labor division and not only from reproduction risks, the women capacity of struggle for overcoming those risky situations while acting for more equal opportunities, a good contribution to the advance of risks prevention more in general.

WeW05:3 Engendering legislations and government policies in Uganda; tactics and strategies of Uganda women parliamentarians

Amongi Betty Ongom Member of Parliament-Uganda

In almost every nation, women and girls make up the poorest of the poor, constitute the most marginalized and disempowered sectors of society, and face repeated violations of their basic human rights. For over three decades, women's rights organisations around the world have struggled to raise awareness that this situation is not only in clear violation of the UN Human Rights Charter, but also detrimental to the long-term, sustainable economic, social and political development of all societies.

Over the last two decades, non-profit, community-based organisations have proved themselves to be the strongest and most effective force for enabling grassroots to participate in the resolution of community problems and the promotion of human rights. Indeed, these citizen groups, of which women are often the backbone, have filled critical gaps in areas such as social services, human rights, and environmental protection.

However, without enabling policies and laws, all these women movements can hardly play a role in transforming the socio-economic environment in their various localities in favour of women. It is against this background that the women's movement thought it wise to engage in partnership and network with governments and parliaments so as to influence the processes of law makings and policies design in favour of women globally.

In Uganda, the women members of parliament have constantly organised themselves to identify gender gaps in all legislation, government programs, government policies and in all other related matters that comes to the national assembly-Parliament so as to respond positively and integrate gender perspectives in such processes.

This paper will therefore, share the successful experiences of Uganda women Parliamentarians who have, and are struggling to make a head way in addressing legislation and government policies to ensure that it correlate with gender equity in all sectors.

It will share statistics, national gender policies and its implementation with participants to benefit from our experience. It will also analyse how women parliamentarians have succeeded in engendering legislation, government policies and programs with specific examples of such success.

It will share tools, strategies and tactics that women parliamentarians have used to reach where we are and also challenges that we struggle to overcome in our quest to achieve total gender equality in Uganda.

The paper shall base its presentation on practical realities on the ground and will use Ugandan model of achievements as a model that can help women globally to address gender issues through engendering the legislation.

WeW05:4 Methods for Action-oriented Feminist Research in Ergonomics.

Karen Messing, , Ana María Seifert Université du Québec à Montréal, Montreal

Since 1993, an interdisciplinary university research group has collaborated with three Québec trade unions in attempts to change women's working conditions. The collaboration has produced research in ergonomics, law, social work, biology and sociology, leading to some changes in working conditions and gains in scientific knowledge. We discuss here the methods used in ergonomics research during the collaboration, and the framework for the collaboration as a whole.

The methods used are based on the analysis of work activity, developed by ergonomists in France (Wisner et al., 1967; Laville, 1976; Teiger, 1977; Garrigou et al., 1995; Guérin et al., 1997). This method integrates observation of work activity and interviews with workers and key informants in order to create a portrait of the working conditions. The work is generally characterised and then critical operations are chosen and observed in more detail (Lamonde and Montreuil 1995). The purpose of the intervention is to respond to a problem and find solutions, but the method also generates knowledge about working conditions. We think it is particularly well suited to revealing unsuspected aspects of women's work, as shown previously by the research of Catherine Teiger, Nicole Vézina and others (Dessors et al. 1978; Teiger and Plaisantin 1984; Teiger et Bernier 1992; Vezina et al. 1992; David et al. 1999). We have adapted the method to a union-university collaboration on women's occupational health, particularly in service occupations, which we will describe with examples from several studies.

To summarise, the procedures involved are: Effective and careful listening to women workers to establish the nature and extent of occupational health problems and their suspected causes in the work activity; listening to women workers to help determine times and places where the work activity at risk can be observed and documented; establishing a complete context for these observations by prior and complementary interviews and examinations of all sources of data; by observing work activity and registering workers' comments on the activity, testing hypotheses relating to determinants of the work activity; formulating suggested solutions based on the determinants; listening to workers' opinions on the interpretations and solutions, and including them in the analysis. The union partners should then be able to use the researchers' conclusions to gain changes in the workplace. In order to provide a clear picture of the methods, we give detail on these procedures and some examples taken from the experience of our partnership.

WeW05:5 Effect of Sexism on Female Health Workers and its Dimensions on Trade Unions

Ilknur Tenekeci

Trade Union of Turkish Health Worker, Ankara, Turkey

This study examines the impact of sexism in the health sector with reference to the trade unions in the sector. Literature review on the basis of such key concepts like patriarchy, sexism, public sphere and trade union democracy as well as in depth interviews with the male and female members and managers of one workers and public employees trade union is done.

The unionising tendency of women in Turkey is quite low. There are four main reasons for this: Economic, legal, social and union-related reasons.

Among the economic factors for the relatively low lewel of unlonisation of women, the majority of women being remote from wage labour in the formal sector by either working as merely family labour or in the informel sector can be considered. However, women health workers take place in the wage-worker category and women constitute a majority in the health sector. Nevertheless, health sector is not exempt from sexist discrimination. Such discrimination takes place in such aspects like wages, working hours, occupational risk and work responsibilities. Unfortunately there is not much effort to undermine this sexist structure in the health sector. Rather, this kind of discrimination is further enhanced by the existing organisation structure of the health sector.

As for the legal factors. It should be mentioned that there is no formal legal obstacle against the unionisation of most of the health workers. However, labour law and articles regarding unionisation do not prove to be sufficient as there is not enough legal quarantee of jop security as the workers are faced with losing their jops or being banished because of their unionisation activities. This results in heshating to unionise.

Double burden of women- working both at home and wage-labour is the most important social fator that results in the relatively low tendency of unionisation of women. Indeed, being married and with children may lead women workers to pencelve their wage work as secondary and constitute obstacles in having a more promising occupation and career. Besides, these factors also influence the unionisation tendency of women workers negatively.

Another important factor for women's relatively low unionisation level can be found in the male dominant trade union structures. Actually, male trade unionists hardly make an effort for unionising the women workers as they see the economic, legal and social factors as an excuse for their poor efford.

Although the workers' union in the health sector has managed to organise most of the health worker, the number of women members and managers in this trade union is realatively low. This trade union has a male-dominant structure and the union activities of women are quite insufficient. On the other hand, the public employees' union is a trade union where a good number of women are members and union managers. This trade union does not have a male-dominant structure. Although there are more than only a few reason for this disparity between these two trade-unions, the different structures of the trade-unions as well as the different social-cultural background of the women members can be regarded as the main factors for this difference.

WeS01: Tools and Methods for Making Equal Pay Realistic and Value-adding

Chair: Marie Trollvik

Organiser The Equal Opportunities Ombudsman

WeS01: 1 Tools and Methods for making Equal Pay realistic and Value adding

Marie Trollvik

JÄMO, The Swedish Equal Opportunities Ombudsman

In this symposium we will follow the wage-setting process all the way from the collective agreement to action plans for equal pay. Five leaders of European projects concerning equal pay will present tools and methods that are being developed during 2002.

- 1. Presentation of the European project on Equal Pay
- 2. The collective agreement
- 3. The negotiation process
- 4. Analyses of salary and work
- 5. Equal pay in management systems and plans for action and change

WeS01: 2 Presentation of the European project on Equal Pay

Marie Trollvik

JÄMO, The Swedish Equal Opportunities Ombudsman

PEP is a transnational EU funded project between mainly Denmark, Austria, Norway and Sweden focusing on the key actors within pay systems. The Swedish equal opportunities ombudsman is responsible for the organisation.

The main objectives are

- · Exchange experiences and best practices between mainly Denmark, Austria, Norway and Sweden
- · Find and disseminate tools for realizing equal pay to wage negotiators. Tools and methods will be put together in a Tool Kit for Equal Pay and distributed on the internet and as printed publications.
 - · Encourage and support European employers to start activities for equal pay
- · Form permanent local and national networks to increase the capacity and awareness of wage negotiators

Background to project

The European Parliament adopted a resolution on equal pay for work of equal value at its plenary session on 20 September 2001. The resolution states that there is still an average wage gap of 28% between women and men in the EU. (Recent European figures will be showed at symposium)

Although a proportion of this is due to certain structural differences such as age, training, occupation and career patterns, the average differential is still 15% even after these factors have been taken into consideration. Although it welcomes and acknowledges the contributions of all the initiatives taken in recent years to close this differential, including EU legislation and attempts to improve data collection, the European Parliament maintains that 'efforts need to be stepped up both at European and national level'.

The resolution therefore calls on individual Member States to improve efforts in areas such as forming an accurate picture of pay differentials between men and women, gender-neutral job evaluation and raising awareness of equal pay issues. It also calls on the European Commission to examine the progress of Member States in these areas.

The EP also calls on Member States to encourage individual employers to draw up annual equality reports and urges both sides of industry – employers and trade unions – to put unequal pay between men and women on their agenda and look at how to promote the advancement of women in the workplace.

Finally, the resolution urges the Commission and social partners to formulate an overall strategy for narrowing the gender pay gap, looking at issues such as job evaluation, labour market organisation, new forms of work, the definition of pay and the impact of work organisation on women's pay

WeS01: 3 Checking collective agreements

Ingrid Nikolay-Leitner,

the Austrian Ombud for Equal Employment Opportunities, project leader of the Austrian contribution to PEP.

The Austrian partner is contributing to the European project with a survey in checking 21 collective agreements with the purpose of finding best-practice examples for the improvement of gender-equality.

The Austrian Ombud for Equal Employment, in cooperation with the largest Austrian union (metal working industries/mining/textile industry) are checking all collective agreements within the union to make suggestions how to improve gender equality through regulations in the collective agreements and through their application. The aim is to build up a best practice example and a model for the improvement of collective agreements in other branches.

During the symposium the method used for checking the agreements will be described, as well as the results so far.

WeS01: 4 Turning new wage systems to equal pay

Kenneth Reinicke Centre on Gender Equality, Copenhagen.

The Danish partner contributes with a project to turn new wage systems to equal pay. Through research and focus groups in three Danish cities, the project aims to evaluate the consequences of new wage systems, and increase the capacity of local negotiators in to avoid gender wage discrimination.

Through the establishment of three local focus groups (panels) of employers/employees in three Danish cities, through the extended use of tested and successful methods in analysing unequal pay and through targeted awareness—raising, the project seeks to combat the gender wage gap which recently has been documented as a unwanted result of new and more market-like wage systems in the public sector. The project also challenges the quiet acceptance of the notion that women's work is less worth than men's work.

The project aims at spreading knowledge and raise awareness among negotiators, organisations and local employers/employees about hidden wage gender differences. Secondly the project aims to develop and disseminate suggestions to avoid these differences in both the public and the private sector.

Some of the tools that will be developed in the project are

- a competed survey of actual wage differences (wage analyses)
- a fact sheet "equal pay at a glance" a quick reminder to wage negotiators
- brochures for public and private sector on hidden wage discriminations and ways to encounter it. "Oops I did it again"- frequent negotiation blunders and how to avoid them

Results from the experiences so far will be discussed and analysed.

WeS01: 5 Analyses of salary and work

Carin Holm

County Administration of Västra Götaland

Several of the tools used in the European project on Equal Pay have been developed by "Pay Equity Guide" a project run by the Swedish Equal Opportunities Ombudsman from 1998 to 2001. The project focused upon wages and one of the results was the method "Steps to Pay Equity". It was developed to provide an easy method for the evaluation of work demands to be used in connection with wage settings, wage surveys, ranking or comparing different jobs, and as a base for developing individual assessment criteria.

Steps to Pay Equity comes in a booklet. It contains a description how to organize a project, step by step. There is also a Factor Plan, Job Summary Form, description of assigning weights, and an Evaluation Document. In short a complete method for a simple job evaluation.

Carin Holm will demonstrate how to perform both wage analyses and job analyses with "steps to pay Equity".

WeS01: 6 Benchmarking as tool for realising equal pay

Maria Backe,

County Administrative Board of Stockholm

BETSY aims at increasing the knowledge of EC regulations as well as national regulations amongst employers concerning equal pay principles and developing methods in order to facilitate the implementation of applicable regulations. The purpose is to set up national and transnational networks of working groups with employers; gender equality experts and representatives for trade unions, in five European countries, in order to test and benchmark methods for reducing gender pay gaps.

The approach used is based on prior experiences from transnational work. Each partner will set up national working groups that will receive gender equality training and information about regulations concerning equal pay principles. A gender equality expert will be appointed in each country to take part in the groups during the course of the work delivering training, feedback and evaluation. The members of the working groups will meet at national and transnational level to evaluate their work and exchange information and experiences.

As a point of departure a specific method, Gender Equality in Management Systems, will be tested and further developed.

The method focuses different work areas, in this project specifically salaries and benefits.

The method includes analysis of gender-segregated salaries, job evaluations and creation of action plans to reduce gender pay differentials. At the end of the project all employers will get a profile of their gender equality work describing successful areas as well as areas of improvement. All employers will be able to compare themselves with organizations in their own country as well as in other countries i.e. benchmarking. Main target groups are employers, gender equality experts and representatives for trade unions in five European countries (Italy, Spain, Germany, Finland and Sweden).

Maria Backe will demonstrate how the method can be applied by showing a profile from a company. We will conclude the session with a discussion with the audience about ingredients in a relevant action plan for this company.

WeS02: The Total Workload of Women and Men in a Cross-Cultural Perspective

Chair Ulf Lundberg

WeS02:1 The Total Workload of Women and Men in a Cross-Cultural Perspective

Ulf Lundberg Stockholm University

The background of this symposium is the fact that women generally report more health problems than men and that the prevalence of women's stress-related health problems has increased in recent years. This gender difference has been linked to women's changing roles and greater participation in the paid work force, without a corresponding reduction in unpaid work (household chores, child care etc), which have contributed to more role conflicts and a greater total workload. In keeping with this, physiological stress responses show that fulltime employed women, compared with men having the same job, have elevated stress levels off work and a greater spill-over of stress between work and home conditions. The elevated stress levels off work have been associated with women's traditional responsibility for household chores and childcare.

At the symposium, measurements on paid and unpaid workload will be presented for employed women and men in five different countries - Canada, South Korea, Sweden, The Netherlands and Turkey - using the Total Workload scale (Lundberg et al., 1994). Preliminary findings suggest that traditional gender roles still remain and that employed women have a greater total workload than men as well as the primary responsibility for most unpaid work at home. The implications of this for women's health and career possibilities will be discussed from a cross-cultural perspective.

WeS02:2 Total workload of Dutch male and female managers related to their health, personality and cognitive functioning

Marrie H.J. Bekker, Tilburg University, The Netherlands

The present study was first aimed to examine the relationships between self-reported total workload, health (including well-being) en cognitive functioning in a sample of highly educated professionals who combined their jobs with caring for children and the household. Secondly, we investigated the influence of personality in this relationship. Women compared with men were expected to experience a higher total workload, and more negative health- and cognitive effects. Additionally, we expected that ego-resilient persons would report a lower total workload, and more positive effects on health and cognitive functioning.

Respondents were 47 male and 40 female managers (mean age 38.5). They worked at least 32 hours a week, were highly educated, married, and had one or more children living at home. Questionnaires were administered reflecting total work load workload (TWLQ; Lundberg, Mardberg & Frankenhaeuser, 1994), somatic and psychological health complaints (HSCL;

Derogatis et al., 1974), cognitive failures (CFQ; Broadbent, Dooper & Fitzgerald., 1982), and egoreslience/ego-control. (NCVS; Van Aken & Rost, 1998).

Contrary to expectations, men and women did not differ significantly in health and cognitive functioning, nor in total workload; women reported a little more work-stress (p = 0.60). Contrary to expectations too, any significant correlation between total workload and ego-resiliency failed to appear. As expected, ego-resiliency was negatively related to health (p < .001), particularly to psychological health, as well as to cognitive functioning (p < .05).

The fact that there were hardly any sex differences in total workload, health and cognitive functioning, is in contrast with the findings by Lundberg et al. (1994; 2001) and those of one of our other studies (Bekker et al., 2000). Simultaneously however, the results agree with other, recent findings that we obtained in the Netherlands. We will discuss these discrepancies in the context of sample- as well as national/cultural characteristics.

WeS02:3 The Total Workload of Turkish Women and Men

Memet Eskin Adnan Menderes University, Turkey

An empirical investigation of paid and unpaid workload with full-time employed Turkish men and women is currently being conducted. The workload is being measured by using the Total Workload (TWL) questionnaire developed by Lundberg et al., 1994. The Swedish TWL questionnaire was translated from Swedish into Turkish by the investigator who is fluent in both languages. At the end the translations were checked by another person who is also fluent in both Swedish and Turkish. Currently the TWL questionnaire is being administered to a group of teachers, physicians, university teaching staff, and a group of police officers. Four hundred responses are already secured and another 200-300 more are being expected. Turkish society is characterized by segregated sex roles. Against this background Turkish women are expected to have greater total workload than the Turkish men. Women are also expected to have greater responsibility for unpaid household duties than men. Men will have greater responsibility for traditionally masculine activities such as car and household maintenance and managing finances. Total workload of Turkish men and women will also be compared with the findings from other countries. The possible implications of the findings for understanding women's health and distress will be discussed from a cross-cultural perspective.

WeS02:4 Academic physicians in Canada: Gender differences in total workload

Bodil. Bergman Goteborg University

F. Ahmad University Health Network, Women, s Health Program

D. E. Stewart the University Health Network and University of Toronto.

Paid and unpaid workload was measured in full-time employed female and male physicians in Canada, using the Total Workload (TWL) questionnaire (Lundberg et al, 1994). Data from 40 physicians (17 women and 23 men) provided completion of the survey. The mean age of the women was 45.5 years (SD=7.4; range 33-62 years) and of the men 48.4 years (SD=8.6; range 33-66 years). There was a gender-difference in responsibility for unpaid duties such as household chores and child care (p=.01). The sum of unpaid work hours was larger for women doctors than for men doctors (p=.05). Women reported fewer hours in paid work than men but the difference was not significant (M=51.8 hours vs. M=62.0 hours; p=.08). The average number of total workload-hours did not differ significantly between the sexes (71.9 hours for women and 71.1 hours for men).

WeS02:5 Has the total workload of Swedish men and women become more equal during the last 10 years?

Ulf Lundberg, Stockholm University, Leeni Berntsson, Nordic School of Public Health, Göteborg

About 10 years ago, paid and unpaid workload was measured in full-time employed female and male white collar workers in Sweden, using the Total Workload (TWL) questionnaire (Lundberg et al., 1994). Data from 679 women and 501 men, matched for age (range 32 - 58 years), family situation, education and occupational level, revealed that women had a greater TWL than men (mean = 73.5 versus 67.3 h/week, p<.0001), and that the TWL and the gender differences increased with the number of children in the family. In addition, more women than men were found to have the primary responsibility for almost all unpaid duties at home (household chores, child care). Recently, this study was replicated with the same instrument and similar groups of female (n=743) and male (n=595) white collar workers of the same ages. In keeping with the previous results, it was found that women had a greater TWL than men (mean = 73.8 versus 69.2 h/week, p<.0001) and that the TWL and the gender differences increased with the number of children. Furthermore, it was found that women still are carrying the main responsibility for almost all unpaid duties, with the same three exceptions as in the previous study, i.e., car and household maintenance and managing finances. In conclusion, during the last 10 years in Sweden, only very small changes have been made towards equality between the genders in terms of paid and unpaid workload and responsibility for unpaid work at home. The results will be compared with findings from similar studies in other countries and the implications for women's stress and health will be discussed.

WeS02:6 Gender Inequalities in Health and Domestic Work

Izabella Rohlfs, Carme Valls-Llobet, Margarita Lopez, Lucia Artazcoz ,; Eva Cirera. Centro de Analisis y Programas Sanitarios – CAPS – Barcelona

Several studies show that paid work has a positive effect on women's health, although few studies have shown this relationship in Southern-European countries. Work overload and the consequences of the double burden remain still little studied, as well. Our study has three main goals: to characterise the amount of domestic work done by women and men that have a paid job, to establish in which degree domestic or care work is shared within family and to analyse women's and men's perceived health and stress in this context.

We analysed 607 married or cohabiting men (24.2%) and women (75.8%), working as teachers (66.5%), nurses (50.5%) or in white collar jobs (12%), through a structured self-response interview. The average age was 39.9 years (SD=6.55) for women and 41.2 (SD=7.06) for men. Family unit membership was as follows: 18.9% of respondents lived only with their partner, 68% lived in homes with 3-4 members and 13% in homes with more than 4 members. 80% lived with their children and 6% with older persons (aged 65 years or over). More than half of the women (58.2%) and 36.6% of the men had a paid domestic worker to take care of part of domestic chores.

When asked about the degree in which they share domestic work, remarkably 28.9% of women declared that they carried the main responsibility for childcare, whilst only 1.8% of the men answered the same. Women did almost all daily cleaning, dishwashing, clothes washing or ironing work, whilst their implication in car maintenance, home repairs, gardening and budget management tasks was minimal. The average number of hours per week dedicated to domestic work were 22.2 (SD=12.1) for women and 12.2 (SD 8.1) for men. Considering that only 7,5% of them are part-time workers, this result stresses the fact that these women have a very hard working day. This is consistent with the observation that one third declared that in the last week they had not had any time left for their hobbies (personal interests). When they have difficulties to cover their usual tasks, the majority (63%) says that they reduce their leisure time, 13% diminish the time dedicated to domestic work and only 1% reduced their paid work hours.

Whilst 9% of men declared a poor health condition, in the case of women this proportion was of 16.2% (p<0.05). The answers to the more specific questions referring to stress related to domestic work and to paid work, showed clear differences in stress attributed to domestic work in the case of women and men. Nearly half of all the women (44.4%) declared that domestic work was a source of a big or a rather big amount of stress, whilst less than a fifth of all the men (17.8%) declared the same. 39% of women and 13% of men attributed their stress problems to domestic work. As for paid work, both women and men (76% and 66.4% respectively) declared to suffer a great or a rather great amount of stress related to their jobs.. The evaluations of stress attributed to paid employment showed no statistically relevant differences between women and men: 79.2% of women and 77.1% of men said their stress was due in a great or rather great degree to their jobs. 90.1% of women and 81.5% of men felt very tired at the end of their paid work journey (p=0,005).

To establish the various factors that might intervene simultaneously, and possibly in different ways, in the genesis of domestic work-related stress in women and men, we made a logistical regression analysis of our data, segregated by gender and adjusted for possibly distorting variables, such as age, number of weekly hours dedicated to domestic work, number of home members, free time for personal interests, availability of paid home help, partner with a paid job. Curiously, in the case of men, none of the former variables appeared to be significantly linked to the risk of domestic

work-related stress. On the contrary, in the case of women, the risk gradient increased with the number of hours of domestic work (OR =1.79 IC95% 1.07-2.99 for those working 21- 28 hours/week and OR= 2.49 IC95% 1.41-4.40 for those working more than 28 hour/week) as well as with the numbers of home members (OR=3.03 IC95% 1.53-6.00 for those living with 2-3 other home members and OR=4,36 IC95% 1.74-10.96 for those living with 4 or more other home members). Having no free time for personal hobbies (interests) (OR=4.19 IC 95% 1.36-12.94) was also found to be statistically relevant.. Instead, no links were found between stress and paid domestic help or with the fact of being very tired after their paid working day.

The descriptive analysis of our data already pointed to the enormous inequality in the gender division of labour prevailing in Spain. A more detailed analysis shows that these inequalities have obvious repercussions for women's health and outlines how various aspects of the home life context increase the stress risk for women but not for men.

WES03: Strategies for Change – an African Example

WES03:1 Strategies for change – an African example

Kamissa Dembele, ISKA co-ordinator for Togo

The project encompasses educational support to women's committees in the ISKA associations in Mali, Tchad, Niger and RCA. Within the project we have trained educators/teachers who in their turn hold study circles principally with trade union women as participants. The project has been going on for three years by now and is starting to show results.

The education aims at empowering the women, to make them conscious of their rights and create awareness of what can be achieved by getting organised. A great deal of the information on HIV/AIDS has to be given orally since illiteracy is very high in these countries. The study circles were rounded up with a conference on strategies, where the respective women's committees drew up guidelines for how to go on working. This far approximately 1 000 women have been participating in the study circles.

In early June a representative from each of the countries will come to Sweden to collect experience on work with gender equality in Sweden.

The women will no doubt want to tell what strategies they have developed to work with trade union issues as well as questions that concern work with HIV/AIDS.

The following women will be participating in the symposium: Madame Kamissa Dembele, ISKA co-ordinator for Togo Madam Toma Béchir, Tchad Madame Mintou Garba, Niger Madame Bagayoko Mariam Sogoré, Mali

WeS04: Health, Work and Reproductive Rights

Chair: Eleonora Menicucci de Oliveira

Organiser: Brazilian Association on Public Health and the National Feminist Net on Health and Reproductive Rights

WeS04: 1 Health, Work & Reproductive and Sexual Rights

Eleonora Menicucci de Oliveira Federal University of Sao Paulo, Brazil

This panel at the III International Congress "Women Work & Health", will discuss one of the most important questions in a woman's life: the right to choose in regard to her reproductive and sexual life integrated with the conditions of the social work organization.

Based on different research done with female workers in different production areas, the papers discussed in this panel, will try to show the impact of gender relations in the female worker's reproductive and sexual life, using as theoretical reference the notion of autonomy versus heteronomy.

Therefore we understand that health and work are basic references from which will develop the theoretic reflections and practical demands of reproductive and sexual rights.

We have given priority to feminist researchers of the highest level in Latin America while composing this panel, not only for their intellectual analyses but also for their militant involvement in the women's health movement.

The worldwide studies on this field – health, work & gender – are still small if compared to studies solely on health & gender. This is because little attention has been given to these themes by the academy and the interdisciplinary theoretical discussion of work, health & gender are being stimulated, on one hand by the imposed reorganization of the workplace such as the deregulation of the social and labor rights, the high level of female unemployment, and the over all impact on women's mental and sexual health.

On the other hand we have watched a daily reconfiguration of the feminine and masculine roll, to answer to the demands of globalization of capital, which occurs in the most personal level of a women's life.

Without a doubt, the scenario is modifying, due to the pressure of these two elements mentioned above

The panel will count on the participation of women that are have been studying and researching these subjects:

Maria Bethania Avila debates the subject of the "sexual and reproductive rights in the context of social relations of work"

Lucilla Scavone debates the subject of the "The construction of reproductive health graduate programs, focusing on the changes and limits"

Angela Maria Carneiro Araujo debates the subject of the "Economic restructuring, gender division of labor and health conditions of Brazilian female workers"

Leonor Cedilho debates the subject of "Is the job control perception the same between male and female blue collar workers?"

Catalina Denman debates the subject of "Health care practices during pregnancy of maquiladora workers in Northem Mexico"

With this reflection we believe we are contributing to the advancement of the research toward the consolidation of the "field of knowledge" in the health, health and gender area in the eyes of reproductive and sexual rights, as well as with construction of a feminine citizenship in the fight for the heightening of their rights.

WeS04: 2 Sexual and reproductive rights in the context of social relations of work

Maria Betânia Ávila

SOS Corpo Gênero e Cidadania (NGO: SOS Body, Gender and Citizenship)

Health is the basic reference from which it is possible to develop theoretical assumptions and practical demands related to reproductive and sexual rights. New subjects are placed for the construction of these rights, and for their relationship with health, in other fields, in way that correlate connect them with other dynamics of social life. This paper analyzes the connections between work relations and the sphere of reproductive and sexual life, which are built from the concepts of citizenship and daily life.

WeS04: 3 New Working Conditions and Sexual and Reproductive Life of Women Workers

Eleonora Menicucci de Oliveira Federal University of São Paulo

This paper is based in different researches accomplished with metal, bank and health female workers and discusses the different impacts of new work conditions to the reproductive and sexual life of these workers. Focusing on gender relations it takes as theoretical framework the notions of autonomy and heteronomy. The connection between health work and gender is used here to give visibility to the sphere of women's subjectivity.

WeS04: 4 The Construction of Reproductive Health Graduate Programs

Lucila Scavone Federal State University of São Paulo

With this text I look for to trace the scenery of the programs dePós - Graduation in Brazil to the light of the gender perspective and your articulation interdisciplinar with the area health and work. Although new and in construction, it consists of a field of knowledge quite consistent econsolidado before the several developed researches. The most challenging reflection is due to the resistance of the academy in relation to the new themes and interdisciplinares.

WeS04: 5 Is Job Control Perception the same between Male and Female Blue Collar Workers?

Leonor A. Cedillo B El Colegeo de Sonora, Mexico

On-the-job situations combining mental and physical effort and individual control have shown to be dangerous for workers' physical and mental health, according to a variety of models (Karasek, 1979; Frankenhaeuser, 1986; Karasek and Theorell,, 1990). Karasek's job strain model instrument (Job Content Questionnaire) uses broad measures of demand and control and has been extensively used and tested in several countries' studies that support the hypothesis that high strain jobs are associated with a number of diseases and negative job outcomes. Control, as the possibility to influence one's job in order to receive more rewards and less threatening (Ganster, 1989) is related to illness when it is weak or health when it is strong. It has been suggested that control as measured by the JCQ is broader than would be desired for addressing subtle differences (Ganster, 1989) that could also be related to gender differences between the linkages of male and female workers to their jobs (Cedillo and Karasek, 2001).

Recently we conducted a study in Mexico among female workers to validate the JCQ and study some other psychosocial risk factors in and outside the job. During the first phase of this study we conducted four semi-structured group and 12 individual interviews among blue collar workers as well as some walkthroughs in the factory to get information for new inputs into our instrument. Low reliability values for the Decision Authority scale, contrasting with the information previously compiled from the interviews and observations in the workplace, lead us to discussions related to gender-oriented perceptions on decision making. Reliability seems to be highly influenced by educational level, and at low education levels reliability may be questionable (Cedillo, 1999).

This paper presents the results from the qualitative analysis of all the group and individual interviews in order to distinguish how women link themselves to their job and in to what extent narrowly-defined control aspects are a substantial part of this linkage. We conducted one new group interview among blue collar male workers using the same semi-structured format as the ones conducted with female workers in order to have a comparison group. It was hypothesized that aspects such as control of work leavings, shift flexibility and freedom to communicate are more important than the control over the task and are also different from those shown to be of most importance for their male counterparts.

Citations.

- Cedillo B.L. *Psychosocial risk factors among women workers in the maquiladora industry in Sonora, Mexico*. Doctoral dissertation. University of Massachusetts, Lowell. Department of Work Environment. December, 1999.
- Cedillo B.L. y Karasek R. "Reliability and validity of the Spanish version of the Job Content Questionnaire among women workers in the maquiladora industry in Mexico" (sent to the J of Occ. Health Psyc. September 2001)
- Frankenhaeuser M. (1986). A psychobiological framework for research on human stress and coping . In M.H. Appley and R. Trumbull (Eds). *Dynamics of stress: physiological, psychological and social perspectives*, pp 101-116. New York: Plenum

Ganster, D.C. (1989). Worker Control and well-being: A review of research in the workplace. In S.L. Sauter, J.J. Hurrell Jr. and C.L. Cooper (Eds) *Job control and worker health*. pp 3-24. New York: Wiley

Karasek, R.A. Job Demands and Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly* 24, (1979), pp. 285-307.

WeS04: 6 Health Care Practices during Pregnancy of Maquiladora Workers in Northern Mexico

Catalina A. Denman El Colegio de Sonora, Mexico

This presentation centers on the health care practices of maquiladora workers during pregnancy. The description and analysis covers practices of use of public and private medicine, as well as ethnomedicine and self-care, including preventive measures.

The maquiladora industry in Mexico has been the fastest growing sector of industry of the past years. Currently over 3,700 factories employ over 1,300,000 workers of which more than 50% are women. Maquiladora workers constitute over one third of all Mexican industrial workers and the value of exports from maquila factories contribute close to one fourth of all Mexican exports. This peculiar model of industrialization has recently expanded beyond the Mexican border states. Few or no occupational health programs in the maquiladoras consider womens' special needs during pregnancy, nor their dual occupational role in the factory and in the home. The social security (IMSS) prenatal programs also do not consider specific occupational risks.

This presentation is based on research which includes ethnographic and survey data of women working in a maquila factory of over 2,300 workers established in the early seventies in Nogales, Sonora, Mexico, along the border with the United States. The ethnography illustrates the day to day life of pregnant woman workers, their strategies to cope at work and at home, and analyzes, as well, the way gender identities and relations mold their practices.

Issues discussed concern (1) the preponderance of maternal identity for the workers studied; (2) the apparent paradoxical reaction of workers who ascribe fundamental importance of access to social security and health services provided by IMSS, but at the same time criticize the quality of IMSS health services; and (3) the role of biomedical professionals in the normalization of suffering of problems in pregnancy.

WeS04: 7 Economic Restructuring, Gender Division of Labour and Health Conditions of Brazilian Female Workers

Angela Maria Carneiro Araújo State University of Campinas (Unicamp)

This paper discuss the new gender division of labour which results from the restructuring process in the metal and garment industries emphasizing its impacts on the work and health conditions of women workers.

The research was conducted in plants of different sizes in the metal and garment industries. Through interviews with managers and women workers from these plants we examine the new forms adopted by female work as a result of the introduction of new management practices and new employment relations. We also examine the perceptions of those women workers about the changes in their work and health conditions, with the purpose of understanding the relationship between the new forms of work organization and the deepening of psychophysical suffering at work.

We concluded that the places assigned to women in the new division of work and the flexibilization of employment relations contribute to increase the deterioration of women work conditions; the outsourcing of production activities and the use of piece work and homework spread the "precarization" of employment conditions to women workers. As a consequence, female workers are more concentrated in low pay jobs, under bad work conditions without protection against the hazards derived from work activities. We conclude that there is a clear relationship between the change in women's work conditions and the increasing of health problems and work diseases (such as RSI - Repetitive Stress Injury - and stress among others) which are reported by female workers in the studied sectors.

WeS05 Strategies for the Prevention of Gender Originated Differences in Exposure

Chair: Kristina Kemmlert

Organiser: The Swedish Work Environment Authority

WeS05: 1 Working conditions, Work related Accidents and Injuries - our Strategies for Prevention.

Kristina Kemmlert, M. Dalin Cronholm, E. Svärd and B. Petterson The Swedish Work Environment Authority

The Swedish Government's work environment policy has two broad objectives. To reduce the risk of illness and accident at work and to improve the work environment in physical, mental and social respects and in terms of organisation of work.

Official statistics on accidents at work have existed ever since 1906. All gainfully employed persons, including training or education, are insured for work injuries. The most commonly reported causes of disorders at work, for both women and men, are musculosceletal disorders caused by stress and mental strain.

Women make up roughly half the labour force but the sexes are heavily segregated, both vertically and horisontally speaking. Women are over represented in certain branches of employment, men in others. Even when employed in the same occupation they have jobs with different kinds of ill-health and different accidents. In addition, women tend to keep the same jobs for a longer time and in this way incur more prolonged exposure to the risk sources which are present there. Differences of job content between women and men, even when sharing the same occupation, are to be taken into account in the use of statistics.

As from 1998, these activities have been based on a strategy entitled "Strategy relating to differences between women's and men's working conditions" – devised in response to a remit from the Ministry of Labour. The administration is active to search for and demand gender-specific statistics and develop knowledge for "seeing through" the statistics, so as to make visible the risks, exposure and ill-health incurred by women and men respectively. Differences of job content between women and men, even when sharing the same occupation, are to be taken into account in the production, analysis and use of statistics.

As two different examples from our programmes we would give you the one dealing with Pregnant and breast-feeding employees and the other dealing with Pesticide treated plants - an investigation.

The first is a harmonization with the Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breast-feeding. In first instance working conditions must be altered so as to eliminate the risk. If this is not possible, the employee must be given leave of absence for the necessary length of time.

Night work need not be done by a person who is pregnant or has recently given birth, if a physician certifies that it may be a hazard to the woman's health and safety. If so, the woman is to be moved to daytime duties.

The second was to investigate the work situation for women and men involved in the handling of pesticided plants. As residues of such pesticides remain on the surface of plants for some time after the treatment and can cause health problems.

Garden centres, florist and other workplaces were visited by work environment inspectors. A questionnaire was used to find out the level of knowledge. The inspectors were informed verbally and handed out an information pamphlet that had been produced within the project. The results showed a dissimilarity in knowledge between women and men.

WeS06: Class and Gender

Chair: Maud Jansson

Organiser: The Swedish Trade UnionConfederation

WeS06:1 Class, Gender and Income

Maud Jansson LO, The Swedish Trade UnionConfederation

No equality without gender equality

Increased equality leads to increased gender equality. When the general level of welfare rises, equality between women and men improves. When the welfare level fell in the 1990s equality between women and men decreased.

LO's women are the winners as regards equality and welfare.

The stratification between people is still determined by social status, ownership and income. In general women own less and have lower incomes than men. Nevertheless there is a difference between different groups of women. Among LO's women, immigrants have the most inferior situation.

LO's class-based interaction lays the foundation for the work of gender equality. By virtue of numbers LO's women have become stronger and shared in increased prosperity in a completely different way from the corresponding groups in many other countries. LO's women, for example, have a very high participation rate compared with working class women in the rest of the world.

Gender equality and equality

Gender equality that is not combined with general efforts towards equality risks supporting or increasing class differences in society. In that case, the differences between women and men are reduced without affecting the prevalent class structure. Gender equality improves but at the price of increased class differences. A clear example is the recruitment to universities and institutes of higher education where there are more female students than male. Just as among men, women with an upper or middle class background predominate.

The struggle against class differences and thus the class society is the basis of the trade union movement. For a long time efforts were directed only towards the conflict between labour and capital. It became increasingly clear that class oppression works together with other oppression, such as sexism.

The differences between women and men are fundamental and constant in all social classes, but also show up when it comes to ethnic origin, sexual inclination and functional disability. Immigrant women have worse conditions of life than immigrant men, women with functional disabilities have worse conditions of life than men with functional disabilities.

Being born a woman or a man is decisive for the value and opportunities an individual has. Next after sex comes class as a determinant of an individual's value. That is why the fight against class differences must take place together with the fight against gender differences.

Class and gender give women and men from different social classes different conditions in life. This applies to choice of education, choice of partner, housing and work. The greatest difference in conditions is that between a man in an academic occupation and a woman in an LO occupation, for example a male graduate engineer and a female restaurant worker.

It is important to see and show women and men's different conditions. This requires statistics broken down by class and sex. Only when both class and gender are separated is the true situation revealed.

WeS06:2 The Rewarding Work Organisation (ReWO) – an evaluation tool for development

Renée Andersson LO, Swedish Trade Union Confederation

Organising work better is the secret of a sustainable workforce in the future. This is necessary to improve working conditions for both women and men and should be an efficient way to prevent occupational illness. The Nordic countries are ahead of many others when it comes to health promotion work. Successful health promotion work is largely an organisational issue, and there is a need for strong management to turn health promotion work into a policy, which permeates the whole organisation.

Yet, statistics from Swedish workplaces show that women in general, and LO's women in particular, run a greater risk of suffering certain work-related complaints, since their work more often involves repetitive movements and heavily strained work. Many Swedish women work in areas which in recent years have been subject to severe cutbacks, e.g. healthcare workers, which has resulted in many women having more work to do but without any increased participation in the decision making process. Working under pressure without any influence is a well-known recipe for stress and deterioration in health.

This is alarming but it also implicates that women have most to gain from well-organised workplaces. LO's evaluation tool – The Rewarding Work Organisation - has been developed through experience and several years of trials in improving the work organisation in Swedish workplaces. The main purpose behind this tool is to pass on, in a practical and absorbing manner, part of the knowledge that has been gained over the years in creating new workplaces. We want to ensure that more people may benefit from the successful combination of job satisfaction and an increased level of efficiency in the organisation – a natural outcome of a well-developed work organisation. It is also a way of trying to transform the knowledge that has been compiled in programme documents into concrete and tangible everyday value.

An important experience and departing point for the development of ReWO, is that progress in work of change requires co-operation between the parties in the workplace. There is a need to distinguish between negotiations on conditions such as wage and work time, and an agreement on mutual efforts at improving the work organisation. The decisive difference between these two is that once the parties have agreed during the negotiations, then their joint efforts have been finalised. But when the parties agree on how the work organisation should be improved, that is when the joint efforts on development start.

In order to achieve a successful start on a mutual development project, it is imperative that all involved in the project pull in the same direction. This is why such a project requires more preparatory work and a greater degree of tolerance throughout the process. It is our experience that joint projects based on ReWO may contribute in this regard.

Abbasian, Saeid	TuS06:5	Babenko, Katerina	TuS08:4
Abd-El-Badil, M	SuW08:6	Babirye, Susan	MoP06:4
Abdi Mohamed, Ali	TuW11:3; SuP01	Baccolo, Tiziana Paola	TuP05:1
Abdullahi Hassan, Abdul	lfatah MoP03:4	Backe, Maria	WeS01:6
Acharya, Jiwan S	TuW15:2	Bader, Angelika	SuW10:1
Acharya, Jyotirmayee	MoS04:6	Bahar Özvaris, Sevkat	SuW03:2
Adhiambo Onyango, Ma	aria MoP06:7	Bake, Marite-Arija	TuP04:2
Aggarwal, Kusam	MoP03:5	Balin, Al	TuP02:5
Ahlgren, Christina	MoW04:2	Ballard, Terri	SuS05:5; TuW15:3
Ahmad, F	WeS02:4	Balogh, I	TuS02:3
Ahmad, Waheed	MoP06:6	Balogh, Isvtan	TuW08:1
Akbagysheva, Zamira	MoW14:5	Barajas, Josefin	TuW10:3
Akhter, Nargis	MoW04:5	Barbini, Norma	MoS08:5
Akin, Ayse	SuW03:2	Barbosa-Branco, Anaderg	
Ala-Mursula, Leena	MoS10:2		MoS15:2
Alagappan, Valli	TuW05:4	Barros Duarte, Carla	TuW09:2
Alberto, Maria de Fatima	a WeW01:5	Barry, Jim	TuS07:2 ;TuS07:3
Albin, M	SuW08:2; TuW14:3	Basu, PS	MoW07:5
Albinson, Margareta	MoS01:2	Bates, Liz	SuS09:4
Alexanderson, Kristina I		Batra, Paraskevi	TuW09:4
	MoS10:1	Beam, Christina A	TuW04:2
Alfredsson, L	TuW17:3	Béchir, Toma	WeS03:1
Ali Jama, Huda	SuP01:5; TuW11:3	Beijer, Anita	MoS02:1
Alm, Livia	SuW04:4	Beinoraviciene, Liongina	TuW01:5
Alvarez Tellechea, Mileio	•	Bekkengen, Lisbeth	SuS02:3
Alymkulova, Aigul	MoS06:4	Bekker, Marrie	WeS02:2 ;TuP01:2
Andersson, Gunnar	MoS13:4	;WeW02:5	T D02.2
Andersson, Renée	WeS06:2	Beldean, M	TuP02:2
Andrén, Daniela	TuW07:5	Benesch, M	MoW13:1
Anh Vinh, Tran	SuS09:3	Berg, Elisabeth	TuS07:1; TuS07:2
Araki, Yoko N	MoP06:2; MoW09:3	Berglund, G	TuS02:4
Araújo, Angela Maria Ca	weS04:7	Bergman, Ann	TuS01:4
Araujo Moreira, Ana Pau		Bergman, Bodil	WeS02:4
Armstrong, Pat	MoW07:6; SuS01:4	Bergqvist, Christina	SuW07:5
Arneson, Hanna	MoW05:6	Bergsten Brucefors, Agne	
Artazcoz, Margarita	WeS02:6	Bernmark, E	TuW03:2
Artenie, Ruxandra Carm		•	WeS02:5; SuW10:3
Attanapola, Chamila	MoW04:1	Besharat, Mohammad Al	
Axmon, Anna	SuW08:2	Betânia Avila, Maria	WeS04:2

Birkás, Emma SuW05:3 Chang, Unhee TuP05:4 Bjerén, Gunilla SuS08:2 Chiesa, A TuP05:4 Blank, N MoP02:4 Chiin, Maria Abdullah TuW07:2 Blank, Vera L G MoP02:4 Chiirowa, Dorothy Miriam WeW03:2 Blewett, Verna SuW06:3 Chiironi, M Teresa MoP06:6 Blomkvist, Vanja TuS11:4 Chultem, Myagmartseren TuW01:1 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bodrova, Valentina TuW13:3 Cocarla, A MoW08:2 Bodrova, Valentina WeW04:3 Coflede, V TuP02:2 Bondarovska, Valentina MoP01:1 Coldea, Victoria TuP02:2 Bosoo, Maria Giuseppin SuW05:2 Corradi, Laura MoW07:2	Bildt, Carina TuS09:5; TuW	17:3; TuS09:4	Chandler, John	TuS07:2
Blank, N MoP02:4 Chin, Maria Abdullah TuW05:2 Blank, Vera L G MoP02:4 Chirewa, Dorothy Miriam WeW03:2 Blewett, Verna SuW06:3 Chironi, M Teresa MoW06:5 Blomkvist, Vanja TuS11:4 Chitea, Jessie K MoP06:3 Bluff, Elizabeth MoP04:7 Chultem, Myagmartseren TuW01:3 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock Berti, Giuseppina TuW02:4 Cirera, Eva WeS02:6 Bodrova, Valentina TuW01:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffeey, Margaret MoW08:2 Bondarovska, Valentina MoP01:3; TuS08:1; TuS09:6 Coldea, Victoria TuP02:2 Bondarovska, Valentina MoP01:1 Copsey, Sarah TuS11:1 MoW08:2 Bord, Meg A SuS05:2; TuS09:1; TuS09:1 Collias, Aila TuS11:1 Bord, Meg A SuS05:2; TuS09:1; TuS09:1 Collias, Aila TuS11:1 Bosco, Maria Giuseppin SuW05:5 Correat, Laura TuS11:1 MoS03:2 Bort, S	Birkás, Emma	SuW05:3	Chang, Unhee	TuP05:6
Blank, Vera L G MoP02:4 Chirewa, Dorothy Miriam WeW03:2 Blewett, Verna SuW06:3 Chironi, M Teresa MoW06:5 Blomkvist, Vanja TuS11:4 Chita, Jessie K MoP06:3 Bluff, Elizabeth MoP04:7 Chulterm, Myagmartseren TuW01:1 Bock, Patricia MoW03:2 Cicrea, Eva WeS02:6 Bodrova, Valentina TuW02:4 Cicrea, Eva WeS02:6 Bodrova, Valentina WeW04:3 Coffeey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:1 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, Victoria TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, Victoria TuP02:2 Bord, Meg A SuS05:2; TuS09:1; TuS09:1 Coldea, Victoria TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, Victoria TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, Victoria TuP02:2 Bord, Meg A SuS05:2; TuS09:1; TuS09:1 Correadia, Victoria TuS01:1 Bosco, Maria Giuseppin SuW05:5 Correadi	Bjerén, Gunilla	SuS08:2	Chiesa, A	TuP05:4
Blewett, Verna SuW06:3 Chironi, M Teresa MoW06:5 Blomkvist, Vanja TuS11:4 Chita, Jessie K MoP06:3 Bluff, Elizabeth MoP04:7 Chultem, Myagmartseren TuW01:1 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock Berti, Giuseppina TuW01:3 Cocarla, A MoP03:6 Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bordarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bordarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bondarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bordarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bordarovska, Valentina MoP01:3; TuS08:1 Coldea, V Crotria TuS12:1; MoS03:2 Bordarovska, Valentina MoP01:1 TuP02:2<	Blank, N	MoP02:4	Chin, Maria Abdullah	TuW05:2
Blomkvist, Vanja TuS11:4 Chita, Jessie K MoP06:3 Bluff, Elizabeth MoP04:7 Chultem, Myagmartseren TuW01:1 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock Berti, Giuseppina TuW02:4 Cirera, Eva WeS02:6 Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffeey, Margaret MoW08:2 Bondarovska, Valentina MoP01:3 TuS08:3 Coldea, Victoria TuP02:5 Bondarovska, Valentina MoP01:1 Coldea, Victoria TuS08:3 Collins, Aila TuS11:1 Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 TuS08:3 Collins, Aila TuW15:3 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 TuS08:3 Correz Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Cornegon, Rosemary SuS02:2 Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP04:4 Cuelenaere, Boukje MoW09:7 <t< td=""><td>Blank, Vera L G</td><td>MoP02:4</td><td>Chirewa, Dorothy Miriam</td><td>WeW03:2</td></t<>	Blank, Vera L G	MoP02:4	Chirewa, Dorothy Miriam	WeW03:2
Bluff, Elizabeth MoP04:7 Chultem, Myagmartseren TuW01:1 Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock Berti, Giuseppina TuW02:4 Cirera, Eva WeS02:6 Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:6 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; Coldea, Victoria TuP02:5 Compsey, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Corretz Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Cosboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Bruuc, Jennifer SuW04:2 da Graca Rabelo, Maria<	Blewett, Verna	SuW06:3	Chironi, M Teresa	MoW06:5
Bock, Patricia MoW03:4 Cigdem, Esin SuW03:2 Bock Berti, Giuseppina TuW02:4 Cirera, Eva WeS02:6 Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:6 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; TuS08:1; Coldea, Victoria TuP02:5 TuS08:3 Collins, Aila TuS11:1 Borg, Karin MoP01:1 Copsey, Sarah TuS1:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brisman, J TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Coslooth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brito, Jussara SuS09:4 Cuelenaere, Boukje MoW09:7 Brunce, Nigel SuS09:4 Cuelenaere, Boukje TuP01:3 Bruce, Nigel <td>Blomkvist, Vanja</td> <td>TuS11:4</td> <td>Chita, Jessie K</td> <td>MoP06:3</td>	Blomkvist, Vanja	TuS11:4	Chita, Jessie K	MoP06:3
Bock Berti, Giuseppina TuW02:4 Cirera, Eva WeS02:6 Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:6 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; TuS08:1 Coldea, Victoria TuP02:5 Borg, Karin MoP01:1 Copsey, Sarah TuS11:1 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez, Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brightwell, Stephen TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuclenaere, Boukje MoW09:7 Brito, Jussara TuP03:4 Cuclenaere, Boukje MoW09:7 Brunnberg, Hans WeW04:2 Ga Graca Rabelo, Maria SuW01:1 Bucur, L SuP04:1 SuBoit, Gale on Mowos:3 TuP01:3 Bué, Jennifer SuW09:2 Dahlgere, Lars	Bluff, Elizabeth	MoP04:7	Chultem, Myagmartseren	TuW01:1
Bodrova, Valentina TuW13:3 Cocarla, A MoP03:6 Bogus, Thomas WeW04:3 Coffey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:6 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; Coldea, V TuP02:5 Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Corompton, Rosemary SuS02:2 Brisman, J TuW14:3 Cosoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS09:4 Cuelenaere, Boukje MoW09:7 Brunnberg, Hans WeW04:2 da Graca Rabelo, Maria SuW11:6 Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Danin Cronholm, M WeS05:1	Bock, Patricia	MoW03:4	Cigdem, Esin	SuW03:2
Bogus, Thomas WeW04:3 Coffey, Margaret MoW08:2 Bond, Meg A SuS05:2; TuS09:1; TuS09:6 Coldea, V TuP02:2 Bondarovska, Valentina MoP01:3; TuS08:1; TuS08:3 Coldea, Victoria TuP02:5 Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Brunnberg, Hans WeW04:2 da Graca Rabelo, Maria SuW11:6 Brunnberg, Hans WeW04:2 Dahlberg, Raymond TuW01:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damila, Inger	Bock Berti, Giuseppina	TuW02:4	Cirera, Eva	WeS02:6
Bond, Meg A SuSO5:2; TuSO9:1; TuSO9:6 Coldea, V TuP02:5 Bondarovska, Valentina MoP01:3; TuSO8:1; TuSO8:1; TuSO8:3 Coldea, Victoria TuP02:5 Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Brunce, Nigel SuS09:4 da Graca Rabelo, Maria SuW11:6 Brunnberg, Hans WeW04:2 da Graca Rabelo, Maria SuW11:6 Bué, Jennifer SuW09:2 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer SuW09:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 <td>Bodrova, Valentina</td> <td>TuW13:3</td> <td>Cocarla, A</td> <td>MoP03:6</td>	Bodrova, Valentina	TuW13:3	Cocarla, A	MoP03:6
Bondarovska, Valentina MoP01:3; TuS08:1; TuS08:3 Coldea, Victoria TuP02:5 Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Cosboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Brunnberg, Hans WeW04:2 da Graca Rabelo, Maria SuW11:6 Bucur, L SuP04:1 Dahlberg, Raymond TuW01:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer SuW04:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Carlsson, Bibbi TuS04:1 Danulescu, Eugenia <td>Bogus, Thomas</td> <td>WeW04:3</td> <td>Coffey, Margaret</td> <td>MoW08:2</td>	Bogus, Thomas	WeW04:3	Coffey, Margaret	MoW08:2
Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Cosboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Bruce, Nigel SuS09:4 da Graca Rabelo, Maria SuW11:6 Brunnberg, Hans WeW04:2 da Silva Santos, Rosângela TuP01:3 Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Calverley, Angela TuW04:1 Dannulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Danulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Das Biaggio, Nora Nelida TuW12:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Davies, Karen SuW01:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Bond, Meg A SuS05:2; TuS	09:1; TuS09:6	Coldea, V	TuP02:2
Borg, Karin MoP01:1 Copsey, Sarah TuS12:1; MoS03:2 Bosco, Maria Giuseppin SuW05:5 Corradi, Laura TuW15:3 Botoc, M TuP02:2 Cortez Salas, Ana MoW07:3 Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Bruneperg, Hans WeW04:2 da Silva Santos, Rosângela TuP01:3 Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Calverley, Angela TuW04:1 Danton, Margaret SuW07:3 Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Castriotta, Maria MoP01:2 Davies, Sharon SuW07:3 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Bondarovska, Valentina MoPo		Coldea, Victoria	TuP02:5
Bosco, Maria Giuseppin Bosco, Maria Giuseppin Botoc, M TuP02:2 Corradi, Laura TuW15:3 Corradi, Laura TuW07:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Curtis, Gwen SuW01:1 Dahlberg, Raymond TuW03:3 SuW01:1 Dahlberg, Raymond TuW03:3 Dahlgren, Lars WeW03:3 Dahlgren, Lars WeW03:3 Dahlin Cronholm, M WeS05:1 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Cardenal, Violeta MoP05:4 Danulescu, Eugenia TuW02:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW01:3		TuS08:3	Collins, Aila	TuS11:1
Botoc, M Brightwell, Stephen TuW04:2 Crottez Salas, Ana MoW07:3 Crompton, Rosemary SuS02:2 Brisman, J Brito, Jussara Brito, Jussara Bruce, Nigel Brunnberg, Hans Bucur, L Bucur, L Buse, Jennifer Burström, Lage Cabral Félix de Sous, Isabela Calverley, Angela Calverley, Angela Cardenal, Violeta Cardenal, Violeta Carstensen, Gunilla Castriotta, Barua Cortez Salas, Ana MoW07:3 Crompton, Rosemary SuS02:2 Crompton, Rosemary SuS02:2 Crompton, Rosemary SuS02:2 Crompton, Rosemary SuS02:2 Curtis, Gwen SuW01:1 da Graca Rabelo, Maria SuW11:6 da Silva Santos, Rosângela TuP01:3 Dahlberg, Raymond TuW03:3 Dahlgren, Lars WeW03:3 Dalin Cronholm, M WeS05:1 Danilda, Inger TuS06:1; TuS06:2 Danulescu, Eugenia TuP02:1 Danulescu, Eugenia TuP02:1 Das Biaggio, Nora Nelida TuW12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Davies, Karen SuW01:1	Borg, Karin	MoP01:1	Copsey, Sarah TuS12	:1; MoS03:2
Brightwell, Stephen TuW04:2 Crompton, Rosemary SuS02:2 Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina Bruce, Nigel SuS09:4 Brunnberg, Hans WeW04:2 Bucur, L SuP04:1 Bué, Jennifer SuW09:2 Burström, Lage Cabral Félix de Sous, Isabela Calverley, Angela Cardenal, Violeta Cardenal, Violeta Cardenal, Violeta Casadei, Gemma MoW06:5 Calvel, Gemma MoW06:5 Cassadei, Gemma MoW06:5 Calvel, Amria MoP01:2 Castriotta, Maria MoW01:2 Cabrale, Karen MoP01:2 Castriotta, Maria MoP01:2 Calverley, Karen MoW07:3 Calverley, Angela Castriotta, Maria MoP01:2 Castriotta, Maria Cedillo, Leonor Celelski, E SuS09:1 Cardenal, Violeta Cardenal, Violeta Castriotta, Maria MoP01:2 Castriotta, Maria Cedillo, Leonor Celelski, E SuS09:1 Davies, Sharon SuW07:3 Cavelenaere, Boukje Curtis, Gwen SuW01:1 Caseboukje MoW09:7 Curtis, Gwen SuW01:1 Cardenae, Boukje MoW09:7 Curtis, Gwen SuW01:1 Castriotta, Maria MoP01:2 Dahlberg, Raymond TuP01:3 Dahlberg, Raymond TuW03:3 Dahlgren, Lars WeW03:3	Bosco, Maria Giuseppin	SuW05:5	- •	TuW15:3
Brisman, J TuW14:3 Csoboth, Csilla SuW05:3 Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Brottare Schmitz, Catharina SuS07:1 Curtis, Gwen SuW01:1 Bruce, Nigel SuS09:4 da Graca Rabelo, Maria SuW11:6 Brunnberg, Hans WeW04:2 da Silva Santos, Rosângela TuP01:3 Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Calverley, Angela TuW04:1 Danton, Margaret SuW07:3 Canivet, Catarina TuS02:6 Danulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Botoc, M	TuP02:2		MoW07:3
Brisman, J Brito, Jussara Brito, Jussara Brottare Schmitz, Catharina Bruce, Nigel Brunnberg, Hans Bucur, L Bucur, L Bucur, L Bush, Jennifer Burström, Lage Cabral Félix de Sous, Isabela Carlsen, Qaraina Cardenal, Violeta Cardenal, Violeta Carstensen, Gunilla Castriotta, Maria Cedillo, Leonor Celelski, E Brito, Jussara TuP03:4 Cuelenaere, Boukje MoW09:7 Cuurtis, Gwen SuW01:1 Curtis, Gwen SuW01:1 Dahlberg, Raymond TuP01:3 Dahlberg, Raymond TuW03:3 Dahlgren, Lars WeW03:3 Dahlgren,	Brightwell, Stephen	TuW04:2	Crompton, Rosemary	SuS02:2
Brito, Jussara Brottare Schmitz, Catharina Bruce, Nigel Brunnberg, Hans Bucur, L Bucy, Jennifer Burström, Lage Cabral Félix de Sous, Isabela Calverley, Angela Canivet, Catarina Carstensen, Gunilla Carstensen, Gunilla Casadei, Gemma Callelia, Inger Callelski, E Callelski, E Callelski, E Calverley, Angria Catelaga, Angria Catelaga, Angria Curtis, Gwen SuW01:1 Curtis, Gwen SuW01:2 Challenaere, Boukje SuW01:1 Curtis, Gwen SuW01:1 Curtis, Gwen SuW01:2 Challenaere, Boukje SuW01:1 Curtis, Gwen SuW01:1 Curtis, Gwen SuW01:1 Curtis, Gwen SuW01:1 Curtis, Gwen SuW01:2 Challenaere, Boukje SuW01:1 Curtis, Gwen SuW01:1 Curtis, Guela SuW01:1 Curtis SuW01:1 Curtis, Guela SuW01:1 Curtis SuW01:1 Curtis, Guela SuW01:1 Curtis SuW01:1 Curtis SuW01:1 Curtis Culling Guela Guela SuW01:1 Culling Guela Guel	Brisman, J	TuW14:3	-	SuW05:3
Brottare Schmitz, Catharina Bruce, Nigel Bruce, Nigel SuS09:4 Ga Graca Rabelo, Maria SuW11:6 Brunnberg, Hans SuV04:2 Ga Silva Santos, Rosângela Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars Bué, Jennifer SuW07:3 Bué, Jennifer SuW07:3 Bué, Jennifer SuW04:3 Bué, Jennifer Burström, Lage Cabral Félix de Sous, Isabela Calverley, Angela Canivet, Catarina Canivet, Catarina Cardenal, Violeta Carlsson, Bibbi TuS04:1 Carstensen, Gunilla Carstensen, Gunilla Castriotta, Maria Cedillo, Leonor Celelski, E SuS09:1 Calverley, Sugenia SuW01:1 Cartinia, Gwen SuW01:1 Cartinia, Guarda Rabelo, Maria SuW11:6 Ad Graca Rabelo, Maria SuW01:3 Dahlberg, Raymond TuW03:3 Dahlberg, Raymond TuW04:1 Dahlberg, Raymond TuW03:3 Dahlberg, Raymond TuW03:3 Dahlberg, Raymond TuW04:1 Dahlberg, Raymo	Brito, Jussara	TuP03:4		MoW09:7
Bruce, Nigel SuS09:4 da Graca Rabelo, Maria SuW11:6 Brunnberg, Hans WeW04:2 da Silva Santos, Rosângela TuP01:3 Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Calverley, Angela TuW04:1 Danton, Margaret SuW07:3 Canivet, Catarina TuS02:6 Danulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Brottare Schmitz, Catharina	SuS07:1	,	SuW01:1
Brunnberg, Hans Bucur, L SuP04:1 Dahlberg, Raymond TuW03:3 Bué, Jennifer SuW09:2 Dahlgren, Lars WeW03:3 Bué, Jennifer TuW07:3 Dalin Cronholm, M WeS05:1 Burström, Lage SuW04:3 Damanesco, Virna Soraya MoW07:2 Cabral Félix de Sous, Isabela Calverley, Angela TuW18:1 Danilda, Inger TuS06:1; TuS06:2 Calverley, Angela TuW04:1 Danton, Margaret SuW07:3 Canivet, Catarina TuS02:6 Danulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW07:3	Bruce, Nigel	SuS09:4		SuW11:6
Bucur, LSuP04:1Dahlberg, RaymondTuW03:3Bué, JenniferSuW09:2Dahlgren, LarsWeW03:3Bué, JenniferTuW07:3Dalin Cronholm, MWeS05:1Burström, LageSuW04:3Damanesco, Virna SorayaMoW07:2Cabral Félix de Sous, IsabelaTuW18:1Danilda, IngerTuS06:1; TuS06:2Calverley, AngelaTuW04:1Danton, MargaretSuW07:3Canivet, CatarinaTuS02:6Danulescu, EugeniaTuP02:1Cardenal, VioletaMoP05:4Danulescu, RTuP02:1Carlsson, BibbiTuS04:1Das Biaggio, Nora NelidaTuW12:1Carstensen, GunillaSuS05:3Das Kundu, NiveditaSuW01:2Casadei, GemmaMoW06:5Daubas-Letourneux, VeroniqueMoS12:1Castriotta, MariaMoP01:2David, PatriciaTuW13:3Cedillo, LeonorWeS04:5Davies, KarenSuW11:1Celelski, ESuS09:1Davies, SharonSuW07:3	Brunnberg, Hans	WeW04:2		TuP01:3
Bué, JenniferSuW09:2Dahlgren, LarsWeW03:3Bué, JenniferTuW07:3Dalin Cronholm, MWeS05:1Burström, LageSuW04:3Damanesco, Virna SorayaMoW07:2Cabral Félix de Sous, IsabelaTuW18:1Danilda, IngerTuS06:1; TuS06:2Calverley, AngelaTuW04:1Danton, MargaretSuW07:3Canivet, CatarinaTuS02:6Danulescu, EugeniaTuP02:1Cardenal, VioletaMoP05:4Danulescu, RTuP02:1Carlsson, BibbiTuS04:1Das Biaggio, Nora NelidaTuW12:1Carstensen, GunillaSuS05:3Das Kundu, NiveditaSuW01:2Casadei, GemmaMoW06:5Daubas-Letourneux, VeroniqueMoS12:1Castriotta, MariaMoP01:2Davies, KarenSuW11:1Cedillo, LeonorWeS04:5Davies, KarenSuW11:1Celelski, ESuS09:1Davies, SharonSuW07:3	Bucur, L	SuP04:1		TuW03:3
Bué, JenniferTuW07:3Dalin Cronholm, MWeS05:1Burström, LageSuW04:3Damanesco, Virna SorayaMoW07:2Cabral Félix de Sous, IsabelaTuW18:1Danilda, IngerTuS06:1; TuS06:2Calverley, AngelaTuW04:1Danton, MargaretSuW07:3Canivet, CatarinaTuS02:6Danulescu, EugeniaTuP02:1Cardenal, VioletaMoP05:4Danulescu, RTuP02:1Carlsson, BibbiTuS04:1Das Biaggio, Nora NelidaTuW12:1Carstensen, GunillaSuS05:3Das Kundu, NiveditaSuW01:2Casadei, GemmaMoW06:5Daubas-Letourneux, VeroniqueMoS12:1Castriotta, MariaMoP01:2David, PatriciaTuW13:3Cedillo, LeonorWeS04:5Davies, KarenSuW11:1Celelski, ESuS09:1Davies, SharonSuW07:3	Bué, Jennifer	SuW09:2	· ·	WeW03:3
Burström, LageSuW04:3Damanesco, Virna SorayaMoW07:2Cabral Félix de Sous, IsabelaTuW18:1Danilda, IngerTuS06:1; TuS06:2Calverley, AngelaTuW04:1Danton, MargaretSuW07:3Canivet, CatarinaTuS02:6Danulescu, EugeniaTuP02:1Cardenal, VioletaMoP05:4Danulescu, RTuP02:1Carlsson, BibbiTuS04:1Das Biaggio, Nora NelidaTuW12:1Carstensen, GunillaSuS05:3Das Kundu, NiveditaSuW01:2Casadei, GemmaMoW06:5Daubas-Letourneux, VeroniqueMoS12:1Castriotta, MariaMoP01:2David, PatriciaTuW13:3Cedillo, LeonorWeS04:5Davies, KarenSuW11:1Celelski, ESuS09:1Davies, SharonSuW07:3	Bué, Jennifer	TuW07:3		WeS05:1
Cabral Félix de Sous, IsabelaTuW18:1Danilda, IngerTuS06:1; TuS06:2Calverley, AngelaTuW04:1Danton, MargaretSuW07:3Canivet, CatarinaTuS02:6Danulescu, EugeniaTuP02:1Cardenal, VioletaMoP05:4Danulescu, RTuP02:1Carlsson, BibbiTuS04:1Das Biaggio, Nora NelidaTuW12:1Carstensen, GunillaSuS05:3Das Kundu, NiveditaSuW01:2Casadei, GemmaMoW06:5Daubas-Letourneux, VeroniqueMoS12:1Castriotta, MariaMoP01:2David, PatriciaTuW13:3Cedillo, LeonorWeS04:5Davies, KarenSuW11:1Celelski, ESuS09:1Davies, SharonSuW07:3	Burström, Lage	SuW04:3		MoW07:2
Calverley, Angela Canivet, Catarina Cardenal, Violeta Carlsson, Bibbi Carstensen, Gunilla Casadei, Gemma Castriotta, Maria Cedillo, Leonor Celelski, E Canivet, Catarina TuW04:1 Danton, Margaret SuW07:3 Danulescu, Eugenia TuP02:1 Danulescu, R TuP02:1 Danulescu, R TuP02:1 Das Biaggio, Nora Nelida TuW12:1 Das Kundu, Nivedita SuW01:2 David, Patricia David, Patricia TuW13:3 Cedillo, Leonor SuW07:3	Cabral Félix de Sous, Isabela	TuW18:1	•	5:1; TuS06:2
Canivet, Catarina TuS02:6 Danulescu, Eugenia TuP02:1 Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carlsson, Bibbi TuS04:1 Das Biaggio, Nora Nelida TuW12:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Calverley, Angela	TuW04:1	. 6	SuW07:3
Cardenal, Violeta MoP05:4 Danulescu, R TuP02:1 Carlsson, Bibbi TuS04:1 Das Biaggio, Nora Nelida TuW12:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Canivet, Catarina	TuS02:6	, 6	
Carlsson, Bibbi TuS04:1 Das Biaggio, Nora Nelida TuW12:1 Carstensen, Gunilla SuS05:3 Das Kundu, Nivedita SuW01:2 Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Cardenal, Violeta	MoP05:4	_	
Carstensen, Gunilla Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Carlsson, Bibbi	TuS04:1	•	
Casadei, Gemma MoW06:5 Daubas-Letourneux, Veronique MoS12:1 Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Carstensen, Gunilla	SuS05:3		
Castriotta, Maria MoP01:2 David, Patricia TuW13:3 Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Casadei, Gemma	MoW06:5	,	
Cedillo, Leonor WeS04:5 Davies, Karen SuW11:1 Celelski, E SuS09:1 Davies, Sharon SuW07:3	Castriotta, Maria	MoP01:2	*	
Celelski, E SuS09:1 Davies, Sharon SuW07:3	Cedillo, Leonor	WeS04:5		
C1 1 . C1 1' M 17711 4	Celelski, E	SuS09:1		
	Chakravarty, Shachi	MoW11:4	de Conto Garbin, Andreia	TuP05:4

de Feyter, Marieke	TuS06:7	El Safty, A M	SuW08:6; SuW08:7
de Grosbois, Sylvie	SuW06:2	El-Samra, G H	SuW08:6; SuW08:7
de Koninck, Maria	MoS12:4; TuW10:4	Eliasson, Miriam	SuP02:
de Rijk, Angelique	MoS15:4; MoS15:3	Elsner, Gine	MoW03:4
Deding, Mette	MoW02:1	Emerek, Ruth	TuS01:3
Dejin-Karlsson, Elisab	oeth TuS02:5	End, Adelheid	MoW13:1
Delany, S	TuW12:5	Eng Chia, Sin	MoS10:4
Delbos, V	SuP02:2	Ericsson, Ylva	SuS03:1
Dembele, Kamissa	WeS03:1	Eriksson, Ulla-Britt	TuW16:2
Dement, John	TuW17:4	Erlandsson, Lena-Karir	n WeW02:3
Demers, P	SuW02:3	Ernstgård, Lena	TuP02:6; TuP04:6
Demir, Dilber	SuW02:1	Eskin, Memet	WeS02:
den Broeder, Lea	TuS12:1	Etebe, Peter MoS05:1	l; MoS05:2; MoS05:5
Denman, Catalina	WeS04:6	Evengård, Birgitta	TuS11:4
Devi Banerjee, Upala	MoS06:3	Evenson, Kelly	MoW12:4
Dhar, Mandira	SuP01:1	Faleyimu, Bode-Law	TuW12:2
Diamond, Rbs	MoS05:4	Fanello, Serge	SuP02:2
Diaz, Ximena	SuW06:2	Fano, Daniela	TuW18:3
Dickson Ashu, Tambe	TuW11:6	Fat, Ligia	TuP02:2
Didkovska, Inna	TuS08:5	Fathy, A S	SuW08:7
Diep, Nguyen Bich	MoW03:3; SuW08:4	Fei, Yang	SuW07:4
Dieterle, W	MoW09:6	Feistritzer, G	MoW13:1
Doi, Yuriko	MoP06:2	Fernandez, Beatriz	MoW13:2
Doig, Alison	SuS09:4	Fernell Markstedt, Eva	MoS01:1
Drejhammar, Inga-Bri	tt MoW11:3	Fesenko, Marina	TuP03:2
Duc, Nguyen Thi Hoa	ai SuS09:3	Figa Talamanca, Irene	SuW05:5; TuW14:6
Dugdill, Lindsey	MoW08:2	Finardi, Marina	WeW05:2
Dunkin, Robin	MoW08:3; TuW04:2	Flood, Róisín	TuS01:2
Duong, Khanh Van	TuW03:5	Flowers, L	TuW17:3
Duran, Erika C Maroc	eco SuW09:5	Fonseca, Tatiana	TuP03:4
Dutta, R	MoW07:5	Fontaine, Julie	SuW06:2
Eberhardt, Eva	SuS06:3	Forslund, Camille	MoS02:3
Eglite, Maija	TuP05:5	Fotache, D	SuP04:1
Ehlert, Ulrike	SuS04:1	Fotinatos, Ritsa S J	MoW08:4
Ekberg, Kerstin	TuW08:6; TuW10:3;	Franchini Lavarda, Antic	onia France TuW02:4
	MoW14:1	Fujimori, Elizabeth	MoW04:6
Eklund, Mona	WeW02:3	Galtry, Judith	MoW10:3
Ekström, Anna	MoS07:1	Garba, Mintou	WeS03:1
Ektor-Andersen, J	TuS02:3	García Casanova, Ysrae	l MoP04:5; TuP03:5

Garimella, Surekha	MoW14:3	Hamon-Cholet, Sylvie	SuW09:2
Gavhed, Désirée	MoW13:5	Handra, C	SuP04:1
George, Rose	TuW12:5	Hanke, Wojciech	WeW03:5
Giffin, Karen	MoW10:4; SuW11:6	Hansson, Agneta	TuS10:4
Gillander Gådin, Ka	,	Hansson, B S	TuS02:3
Gillberg, Harriet	TuS05:1	Hansson, Gert-Åke	TuW08:1
Gitonga, Stephen	SuS09:4	Hansson Risberg, Eva	MoS08:3
Gitonga, Sylvia Kanj		Hartmann, Linley	MoP04:7
Godtland, Per	MoS01:5	Hedblad, B	TuS02:4
Gonik, Viviane	MoW01:5	Hee Pedersen, Christin	
Gonzalez Luna, Mar		Helgstrand, Kristina K	
	Iaria Cristina SuW06:5	Hellsing, Anna-Lisa	TuS06:4
Gonäs, Lena	TuS01:1; TuS09:3	Hellström, Birgitta	SuP02:4
Gorbatkow, Aleksano	der A MoP06:1	Helweg-Larsen, Karin	TuW13:6; TuW13:7
Goulart Pacheco, Va	nise MoS08:4	Henriksson, Chris	TuW10:1
Gradinaru, Felicia	TuP02:1	Hensing, Gunnel	MoP01:1; TuW16:6
Grazuleviciene, Regi	na TuW09:1	Herbert, Robin	MoS03:3
Grecu, L	MoP03:6	Herman, Hilda	TuP05:3
Griskonyte, Ausra	TuW01:3	Herrmann, Peter	TuW13:1
Groot, Wim	MoW05:4	Hershler, R	SuW02:3
Gross, Lyle E	MoS15:1	Hertting, Anna	SuP03:1
Grossi, Giorgio	TuS11:4	Hertzman, C	SuW02:3
Grosso, F	MoP01:2	Hetzler, Antoinette	TuW06:5
Groth, Margit	TuW16:1	Heuser, Isabella	SuS04:2
Grubb, Paula	MoW08:3; TuW04:2	Hidaka, T	TuP01:1
Gudgalyte, I	MoP04:4	Hildingsson, Kerstin	MoS07:1
Guichard, A	TuW16:1	Hochleitner, Margareth	
Guignon, Nicole	SuW09:2		SuW10:2
Gullstrand, E	TuP04:6	Holm, Carin	WeS01:5
Gunarsson, Ewa	MoS04:1; MoS04:2	Holroyd, Eleanor Anne	
Gustafsson-Larlsson		Hong Tu, Nguyen Thi	
Hagander, Barbro	TuS02:6	Hoppmann, Christiane	SuS04:3 MoP06:2
Hagberg, Mats	MoS08:3	Horiguchi, Masako	TuS04:3
Hagman, Maud	MoS08:3	Hovelius, Birgitta	TuP02:4
Hagmar, L	SuW08:2	Huang, Wenyan Hung, Rudy	TuW07:1
Hajj, Mandana	TuW02:2	Hwang, Philip	MoS13:3
Halmer, Regina	WeW04:3	Håkansta, Carin	WeW04:5
Hamberg, Katarina	MoW05:2; MoW05:3	·	MoW12:2; TuW03:2;
Hammarström, Anno	e MoW14:2; SuP02:1; 06:1; SuS01:1; SuW07:6	riaichstaill, Allillka	SuW05:6
1477	50.1, 5u501.1, 5uvv 0/:0		

Hörnqwist Bylund, Son	ya SuW04:3	Karakashyan, A	TuP03:3
Idinoba, Monica Ebele	MoP04:6	Karlqvist, Lena	MoS08:3; TuS09:4;
Inoue, Karina	ToP06:2		TuW03:2; MoW12:2;
Inoue, T	TuP01:1	IZ 1 I C1	TuS09:5
Isacsson, A	TuS02:3	Karlsson, Jan Ch	SuS02:1
Isacsson, S-O	TuS02:3; TuS02:4	Katic, Milka	MoP02:3
Isaksson, Anita	MoS08:3	Kaufmann, Manfred	MoW03:4
Isaksson, Kerstin SuS08	:4; SuS08:5; SuS08:1	Kauppinen, Kaisa	SuS05:1; SuS06:2; SuW11:5; TuS12:1
Ivanescu, G	MoP03:6	Kecklund, Göran	SuW10:5
Jacobshagen, Nicola	MoW08:5	Keil, Winfried	MoW03:4
Jakobsen, Liselotte	SuS02:4	Keita, Gwen	TuW02:6
Jakobsson, Irene	TuS02:6	Kelaher, Margaret	WeW01:2
Jankauskas, Remigijus	TuP05:2	Kemmlert, Kristina	WeS05:1
Janlert, Urban	TuW06:1	Kerr, Michael S	MoP05:1
Jansen, Nicole	WeW02:4	Kevin, May V	MoS10:3
Janson, Staffan	TuW16:2	Khuc, Xuyen	TuW14:4
Janssen, Nathalie	MoS15:3; MoS15:4	Kilbom, Åsa E	MoW12:3; MoW13:5
Janssen, Peter	MoW05:4	Kingma, Mireille	MoS01:6
Jansson, Maud	WeS06:1	Kisting, Sophia	MoS09:3
Janszky, Imre	SuW10:5	Kivinen, Tuula	MoW06:1; TuW10:2
Janzon, L	TuS02:4	Klaesson, Birgitta	ToP06:5
Jayaswal, Meera	TuW13:2	Klinck, Elsabé	MoW11:1
Jeanneau, Madeleine	SuW11:4	Klumb, Petra L	SuS04:3
Jevremovic, Jovan	MoP04:1	Knocke, Wuokko	MoS06:1
Jin Cho, Hyong	TuW16:5	Knutsson, Anders	SuW04:3
Johanson, Gunnar	TuP04:6	Koenen, Karestan	WeW01:2
Johansson, Eva	MoW05:3	Koh, David	MoS10:4
Johansson, Eva Elisabet	h MoW05:1	Koithara, Indira	TuW11:1
Johansson, Gunn SuS08	:1; SuS08:4; SuS08:5	Koome, Martha	TuW05:1
Johansson, Gunnar	TuP02:6	Kopp, Maria S	SuW05:3
Johnasson, Eva	MoW05:2	Koppelin, Frauke	MoP03:1
Joling, Catclijne	MoW05:4	Koszada-Wlodarcyk,	
Josephson, Malin	TuW07:2	Krantz, Gunilla	TuS02:2; TuS11:2
Jousset, N	SuP02:2	Kreicbergs, Andris	MoS02:2
Jovanovic, Jovica	MoP04:1	Krings, Bettina-J	SuP01:2
Järnefelt, Noora	MoW05:5	Kristenson, Margaret	TuW16:4
Kaistha, Sunita	MoW02:4	Kronholm Diab, K	TuW14:3
Kalimo, Raija	TuW15:5	Kugelberg, Clarissa	MoW02:5
Kant, Ijmert	WeW02:4	Kulbachka, Tatiana	TuS08:6

Kundiev, Yuri	TuP03:3	υ,	P02:4; SuW10:3; eS02:1; WeS02:5
Kunz, Alexandra	MoW08:5	Lycke, Alicia	TuS03:1
Kuznecovs, Sergejs	SuW08:5	•	iuP02:6; TuP04:6
Lacomblez, Marianne			TuP05:2
Lagercrantz, Marika	MoW13:3	Maciulyte, Nijole	WeW01:1
Lagerlöf, Elisabeth	MoS03:1; MoS09:2	Magnavita, Nicola	
Lammintakanen, Joha		Magnus, P	SuW09:1
T 3.17 . 11 1	TuW10:2	Maima, Jenta Apwoyo	MoP01:6
Lanne, Matilda	TuW16:6	Makowiec-Dabrowska, Tere	
Laperrere, Eva	MoW12:3	Malenfant, Romaine	TuW10: 4
Lasch, Vera	TuS12:1	Malinauskiene, Vilija	TuW09:1
Lauria, Laura	TuW15:3	Maloney, Eileen	SuS05:2
Laursen, Bjarne	TuW13:6; TuW13:7	Mandal, R	MoW07:5
Lausten, Mette	SuW07:1	Manno, Michael	MoP05: 1
Leijon, O	MoW12:2; TuW03:2	Manuaba, Adnyana	TuW14: 2
Leineweber, Constant	,	Marcondes, W B	MoW02: 2
Lekei, Elikana E	MoW03:5	Marcovich, Malka	MoS06:2
Lemesch, Curt	SuW09:1	Marglar, Donna	SuW06:2
Lepeshkina, Tamara	TuP02:3	Marinho de Souza, Maria de I	
Lepistö, Auli	TuW10:2	M D :	TuW16:5
Lesca, Federica	TuW18:3	Marquez, Francisca	MoW03:6
Liedberg, Gunilla	TuW10:1	Marsch, Gary M	MoW03:1
Liljeholm Johansson,	Yvonne WeW03:4	Martynovskaya, Tatyana	TuP02:3
Lillienberg, L	TuW14:3	Mathenge, Martha	SuS09:4
Lind, M-L	TuW14:3	Mathieu, Chris	TuW06:2
Lindfors, Petra	SuW10:3; MoP03:2	Matinika, Mirriam	SuP01:7
Lindroth, Siv	SuS08:5; SuS08:4	Matisane, Lisa	TuP05:5
Lingam, Lakshmi	SuW06:4	Matton, Nicoletta	SuS05:5
Linnika, Zanna	TuP04:2	May, Ann Mari	MoW07:1
Lippel, Katherine	MoS08:6; SuS05:4	Mayorga Borges de Go, Claudia Andrea	TuW18:2
Lipscomb, Hester	TuW17:4		
Liu, Songqing	TuP02:4	Mazariegos Garcia, Dina Su	
Liu, Zhiming	TuP02:4	Mazzanti, Clelia	TuW15:3
Lloyd, Liz	SuS01:5	Mbua, Imbolo	MoS05:3
Lopez, Crespi	MoW03.6	McDonald, Mary Anne	TuW17:4
Lopez, Margarita	WeS02:6	Medcalf, Carole	TuW11:5
Lossius, Kari	TuS05:3	Medel, Julia	SuW06:2
Lund, Ragnhild	SuW03:3	Meding, Birgitta	TuW14:3
Lundberg, Pranee C	TuW08:2	Meleshkova, G I	MoP06:5

Menckel, Ewa	MoP0	5:3; SuP02:3	Neus Baselga, Manuel	MoW03:6
Menezes, Paulo Rossi		TuW16:5	Newaz, Ware	TuW15:1
Menicucci de Oliveir,	Eleonora	WeS04:1;	Neves, I R	TuP05:4
		WeS04:3	Ng, Cecilia	TuW05:2
Meshkova, Yelena G		:4; TuW01:6	Ng, Vivian	MoS10:4
Messing, Karen		2; TuW16:5;	Ng'ang'a, Caroline Wan	nbui WeW05:1
		; MoW12:3; 2; WeW05:4	Ngowi, Vera	TuP04:4
Mikoczy, Z	100071	TuW14:3	Nguyen, Bich Diep	TuW03:5
Mineo Biagolini, Rosa	ıngela E	MoW04:6	Nguyen, Ngoc Nga	TuW08: 5; TuW03:5
Mittal, S	8	MoW07:5	Nguyen, Thanh Hoa	MoP06 :8
Mocan, A		TuP02:2	Nguyen Thi Dieu, Hong	g WeW04:6
Moen, Phyllis		SuS08:3	Nguyen Thi Hoai, Duc	TuW13:4
Molassiotis, Alex		SuW01:3	Nhiwatiwa, Greater T	MoP04:3
Molenaar, Petra		MoW09:7	Nicolai, Leonore	TuS12:1
Moncarz, Esther		TuW04:3	Nielsen, J	TuW14:3
Moniz, António		SuP01:2	Nienhaus, Albert	MoW03:4
Monteiro Cocco, Mar	ria Inês	SuW09:5	Nijhuis, Frans	MoS15:3; MoS15:4
Moreno, C R C		MoW02:2	Nikolay-Leitner, Ingrid	WeS01:3
Moreno, Jordi		MoW03:6	Nilsson, Kerstin	SuP03:1
Morgensternova, Mor	nika	MoW06:2	Nishiguchi, H	TuP01:1
Mountianou, Larissa		SuW07:7	Noda, Junko	MoP06:2
Muhonen, Tuija		MoW08:1	Nordander, Catarina	TuW08:1
Mukherjee, S		MoW07:5	Nordlund, Anders	TuW08:6
Mukhopadhyay, Susm	ita	WeW02:2	Nordquist, Cecilia	TuW10:3
Müller, Veronika		MoP03:1	Notz, Gisela	MoW06:6
Munguti, Sarah W		SuW11:2	Novo, Mehmed	TuW06:1
Munteanu, Claudia		TuP02:5	Nyaga, Justin	SuS09:4
Mununa, Florence		MoW03:5	Nyberg, Anita	MoW01:2
Muruka, Andrew		TuW08:3	Nygaard, Else	TuW06:4
Murzalieva, Gulgun		TuW01:4	Nyhan, Maria	TuW13:1
Mustajbegovic, Jadran	ıka	MoP02:3	Nyirenda, Alice	TuW12:3
Muto, Takashi		MoW09:3	Nykvist, Karin	MoP03:3
Mwanza, Denise		TuW13:5	O'Sullivan, Bev	MoP02:2
Mårtensson, Charlotte	e	TuS05:2	Obiols, Julián	MoW03:6
Nag, Anjali		TuW17:1	Ogola, Julius Maima	SuW09:4
Nag, P K		TuW17:1	Ohkubo, T	TuW08:2
Nagy, Lorraine Lynch	l	MoW09:1	Ohlsson, Kerstina	TuW08:1
Nascimiento Mazullo,	Paula Mari	a MoW07:2	Okayama, Keio	MoP06:2
Negru, Mihaela		TuP02:2	Okojie, Christiana E E	TuW06:6

Oliviera, Simone	TuP03:4	Quraishy, Zubeeda Banu	SuW06:1
Ollagnier, Edmée	MoW01:5	Raab Glina, Débora	TuW04:4
Ongom, Amogni Bett	ty WeW05:3	Radwan-Wlodarczyk, Zyta	WeW03:5
Orbaek, P	TuS02:3	Raha Kundu, Tanusree	MoW02:4
Orderson, Crystal	MoS04:4	Ramji, Vidja	MoW07:4
Ornoy, A	SuW09:1	Ramos, Sara	TuW09:2
Orth-Gomér, Kristin	a SuW10:5; TuS11:4;	Ramos Margarido, Silviana	SuP01:4
	SuS08:6	Ransom, Eleanor	TuW08:4
Ortiz-Tallo, M	MoP05:4	Ranson, Michael Kent	TuW11:2
Ostry, Aleck Samuel	SuW02:3	Rásky, E	MoW13:1
Owala, Hellen	SuS09:4	Rau, Renate	TuS11:5
Overgaard, Dorthe	MoW04:3	Rees, D	TuW04:1
Palmi, Silvana	TuP05:1	Rees, H	TuW12:5
Panda, Smita Mishra	SuW03:3	Reinicke, Kenneth	WeS01:4
Papale, Adriano	TuP05:1	Renaud, Marie-Hélène	SuW06:2
Papp, Ülle-Marike	SuS06:2	Ribeiro Brito, Cláudia Márcia	MoW07:2
Paravic, Tatiana	MoW13:2; TuW14:1	Riedl, Gabriela	TuW02:5
Paravic Klijn, Tatiana	SuW05:4	Riley, Judith D	TuW04:2
Parikh, Jyoti K	SuS09:1; SuS09:5	Ripault, B	SuP02:2
Parmsund, Marianne	WeW04:2	Risberg, Gunilla MoW05:3	; MoW05:2;
Pawlaczy, Iwona	ToP06:3		TuS04:2
Penneau-Fontbonne,	D SuP02:2	Rizk, Sanaa	SuP02:6
Perrons, Diane	TuS01:2	Robaina-Aguirre, Caristina	TuP01:4
Perski, Aleksander	TuS11:4	Robertson, Shirley A	TuW04:2
Petterson, B	WeS05:1	Rocha, Lys Esther TuW04	:4; MoS08:2
Petterson, Inga-Lill	WeW04:2	Rodrigues da Silva, Guilherme	TuW03:4
Pham, Thi Thuy	SuS09:3	Roehling, Patricia V	SuS08:3
Pham Ngoc, Quy	TuW03:5	Rohlfs, Izabella	WeS02:6
Piedrahita, Hugo	SuP02:5	Romito, Patrizia TuW1	5:3; SuS05:5
Pincus, Ingrid	MoS01:3	Rondon, Marta B	TuS11:3
Pingel, Birgit	MoW11:3	Roquelaure, Y	SuP02:2
Piza-Katzer, H	MoW13:1	Rosenberg, Kerstin	MoW01:3
Pompeii, Lisa	MoW09:4; MoW12:4	Roswall, Maria	TuS02:4
Porro, A	TuW18:3	Rotenberg, Lúcia	MoW02:2
Portela, L F	MoW02:2	Roux-Rossi, Dominique	TuW07:3
Punnett, Laura	TuS09:6; MoS03:3	Rutte, Christel G TuP01:	2; WeW02:5
Pyle, Jean L	TuS09:6	Rydenstam, Klas	MoS13:2
Quinn, Margaret M	MoW03:1	Rylander, A	SuW08:2
Quintero-Ramirez, C	Sirila SuW01:4	Rylander, L	TuW14:3

Sagaityte, Audrone TuW01:1 Shoebridge, Karl TuW01:2 Saito, Murako TuP01:1 Surbestha, Jyotsna TuW12:4 Salazar Molina, Alide SuW05:4 Siddharthan, Kris MoP01:5 Sale, Joanna TuW14:6 SuW05:5 Siba, Mona Sobhy SuW08:5; SuW08:5 Salin, Denise SuW09:3 Siirak, Virve MoW06:4 Samerdokiene, V SuP04:3 Simbirtseva, Lidia TuW05:5 Sanchez Curbelo, Jos-vary René TuP03:5 Siminad, Stela TuP04:0 Sanders, Karin SuW10:4 Siziba, Preeti TuS06:6 Sanders, Karin SuW10:4 Siziba, Margaret TuP04:6 Santhueza, Olivia TuW14:1 Siziba, Margaret TuP04:6 Santhueza, Olivia TuW14:1 Siggeren, Bengt TuW01:6 Saranto, Kaija TuW10:2; MoW06:1 Siggeren, Bengt TuW16:6 Sarbandy, Joseph SuW00:3 Skervfing, Staffan TuW01:6 Saurel-Cubizolles, Marie-Josephe WeW1:3 Skapte, Fig. Staffan TuW16:1 Savikko, Annukka TuW16:2 Swe1, Kevfing	Räsänen, Kimmo	TuW15:5	Shoebridge, Andrea	TuW01:2
Salazar Molina, Alide SuW05:4 Siddharthan, Kris MoP01:5 Sale, Joanna MoP05:1 Sieber, Sandra SuS04:1 Salerno, Silvana TuW14:6; SuW05:5 Siha, Mona Sobhy SuW08:6; SuW08:7 Salin, Denise SuW09:3 Sirirak, Virve MoW06:4 Samchez Aurbelo, Josuary René TuP03:5 Simbittseva, Lidia TuW05:5 Samchez Curbelo, Josuary René TuP03:5 Simoes Barbosa, Regina Helena MoW06:6 Sánchez-López, M P MoP05:4 Simph, Preeti TuV06:6 Sanders, Karin SuW10:4 Siochalova, Olga V TuP03:2 Sanhueza, Olivia TuW14:1 Siziba, Margaret ToP06:1 Sanntoski, Igor TuP04:5 Siggren, Bengt TuW01:6 Sararkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarylorg Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Savikko, Annukka TuW16:3 Supstyte, Grazina SuP04:3 Savinzinen, Minna MoW12:1 Sinith, Thomas J MoW03:1 Savitz, David MoW02	Sagaityte, Audrone	TuW01:3	Shoebridge, Karl	TuW01:2
Sale, Joanna MoP05:1 Sieber, Sandra SuS04:1 Salerno, Silvana TuW14:6; SuW05:5 Siha, Mona Sobhy SuW08:6; SuW08:7 Salin, Denise SuW09:3 Siirak, Virve MoW06:4 Samerdokiene, V SuP04:3 Siimirad, Stela TuW05:5 Samhungu, Beauty MoW02:4 Siimirad, Stela TuP02:5 Sanchez Curbelo, Josvany René TuP03:5 Siimoes Barbosa, Regina Helena MoW10:4 Sanders, Karin SuW10:4 Siixoehalova, Olga V TuP03:5 Sanhueza, Olivia TuW14:1 Siziba, Margaret TuP03:2 Santotski, Igor TuP04:5 Sjögren, Bengt TuP03:2 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristan MoW10:2 Sarpong Yaw, Joseph SuW01:3 Skervfing, Staffan TuW06:1 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:1 Savinainen, Minna MoW12:1 Smith, Kevin TuW16:3 Savitit, David MoW12:2 Sum	Saito, Murako	TuP01:1	Shrestha, Jyotsna	TuW12:4
Salerno, Silvana TuW14:6; SuW05:5 Silna, Mona Sobhy SuW08:6; SuW08:6 Salin, Denise SuW09:3 Siirak, Virve MoW06:4 Samerdokiene, V SuP04:3 Simbirtseva, Lidia TuW05:5 Samhungu, Beauty MoW02:3 Simbirtseva, Lidia TuP02:1 Sanchez, Curbelo, Josvany René TüP03:5 Simoes Barbosa, Regina Helena MoW10:4 Sánchez, López, M.P. MoP05:4 Simoes Barbosa, Regina Helena MoW10:4 Sánchez, Karin SuW10:4 Sivochalova, Olga V TuP03:6 Sanders, Karia TuW10:2 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2 MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW10:2 Saryiko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Saviko, Annukka TuW16:6 Smith, Kevin TuW16:3 Sazonoe, Saguali,	Salazar Molina, Alide	SuW05:4	Siddharthan, Kris	MoP01:5
Salin, Denise SuW09:3 Siirak, Virve MoW06:4 Samerdokiene, V SuP04:3 Simbirtseva, Lidia TuW05:5 Samhungu, Beauty MoW02:3 Simirad, Stela TuP02:1 Sanchez Curbelo, Josvany René TuP03:5 Simoes Barbosa, Regina Helena MoW10:4 Sánchez-López, M.P. MoP05:4 Singh, Preeti TuS06:6 Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Sandueza, Olivia TuW10:2; MoW06:1 Siggren, Bengt TuP02:6 Sanotski, Igor TuW10:2; MoW06:1 Sjögren, Elaine TuW10:2 Saranto, Kaija TuW10:2; MoW06:1 Skalle, Nina-M Kristian MoW10:2 Sarkar, Shrabanti SuW08:3 Skervfing, Staffan TuW16:4 Sarypong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW17:3 Saviel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savinainen, Minna MoW12:1 Smith, Kewin TuW17:3 Savietz, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazarolova, Tatiana MoS12:3;	Sale, Joanna	MoP05:1	Sieber, Sandra	SuS04:1
Samerdokiene, V SuP04:3 Simbirrseva, Lidia TuW05:5 Samhungu, Beauty MoW02:3 Simirad, Stela TuP02:1 Sanchez Curbelo, Josvany René TuP03:5 Simoes Barbosa, Regina Helena MoW10:4 Sánchez-López, M P MoP05:4 Simoes Barbosa, Regina Helena MoW10:4 Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Sanhueza, Olivia TuW14:1 Siziba, Margaret ToP06:1 Sanotski, Igor TuW10:2; MoW06:1 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW16:3 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savitz, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazonova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam WeS03:1 Scaravelli, Giulia	Salerno, Silvana	TuW14:6; SuW05:5	Siha, Mona Sobhy	SuW08:6; SuW08:7
Samhungu, Beauty MoW02:3 Simirad, Stela TuP02:1 Sanchez Curbelo, Josvany René TuP03:5 Simoes Barbosa, Regina Helena MoW10:4 Sánchez-López, M P MoP05:4 Singh, Preeti TuS06:6 Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Sannotski, Igor TuP04:5 Sjögren, Bengt TuP04:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savikko, Annukka TuW16:6 Soares, Angelo TuW17:3 Savitz, David MoW09:4; MoW12:1 Soares, Angelo TuW16:3 Sazonova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam WeS03:1 Scarvelli, Giulia TuP03:1 Spak, Fredrik TuW16:6 Scarvelli, Giulia TuP03:1 Spak, Fredrik WeW03:1 Schéele, Patrik MoS12:3; WeW05:2	Salin, Denise	SuW09:3	Siirak, Virve	MoW06:4
Sanchez Curbelo, Josvany René TuP03:5 Simoes Barbosa, Regina Helena MoW10:4 Sánchez-López, M P MoP05:4 Singh, Preeti TuS06:6 Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Santoski, Igor TuP04:5 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW1:2:1 Smith, Thomas J MoW03:1 Sazonova, Tatiana MoP01:3 Sogore, Bagayoko Mariam WeS03:1 Scaravelli, Giulia TuW15:3 Sonntag, Ute TuP01:3 Scavone, Lucila MoS12:3; WeS04:4 Spindola, Thelma TuP01:3 Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schleifer, Laurence MoW08:3<	Samerdokiene, V	SuP04:3	Simbirtseva, Lidia	TuW05:5
Sánchez-López, MP MoP05:4 Singh, Preeti TuS06:6 Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Sanhueza, Olivia TuW14:1 Siziba, Margaret ToP06:1 Sanotski, Igor TuP04:5 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savinko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW012:1 Smith, Thomas J MoW03:1 Savinzi, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazaronova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam WeS03:1 Scaravelli, Giulia TuW15:3 Sonntag, Ute ToP06:4 Scarone, Lucila MoS12:3; WeS04:4 Spindola, Thelma TuP01:3 Schéele, Patrik MoW03:4 Sprusinska, Elz	Samhungu, Beauty	MoW02:3	Simirad, Stela	TuP02:1
Sanders, Karin SuW10:4 Sivochalova, Olga V TuP03:2 Sanhueza, Olivia TuW14:1 Siziba, Margaret ToP06:1 Sanotski, Igor TuP04:5 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savinko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW012:1 Smith, Thomas J MoW03:1 Savinzt, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazonova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam WeS03:1 Scaravelli, Giulia TuW15:3 Sonntag, Ute ToP06:4 Scavone, Lucila MoS12:3; WeS04:4 Spindola, Thelma TuP01:3 Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schilleifer, Laurence MoW08:3 <	Sanchez Curbelo, Jos	vany René TuP03:5	Simoes Barbosa, Regina	a Helena MoW10:4
Sanhueza, Olivia TuW14:1 Siziba, Margaret ToP06:1 Sanotski, Igor TuP04:5 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW12:1 Smith, Thomas J MoW03:1 Savinainen, Minna MoW12:1 Smith, Thomas J MoW03:1 Savinainen, Minna MoW12:1 Sogoré, Bagayoko Mariam We803:1 Sazonova, Tatiana MoW09:4; MoW12:4 Sogoré, Bagayoko Mariam We803:1 Scaravelli, Giulia TuW15:3 Sogoré, Bagayoko Mariam We803:1 Scaravelli, Giulia TuW15:3 Sonntag, Ute TuW16:4 Scavone, Lucila MoS12:3; We80:4 Spindola, Thelma TuW10:6 Schéele, Patrik MoW08:3 <	Sánchez-López, M P	MoP05:4	Singh, Preeti	TuS06:6
Sanotski, Igor TuP04:5 Sjögren, Bengt TuP02:6 Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Savikko, Annukka TuW16:6 Slapsyte, Grazina SuP04:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW012:1 Smith, Thomas J MoW03:1 Savinz, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazonova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam We803:1 Scarvelli, Giulia TuW15:3 Sonntag, Ute TuP01:6 Scarone, Mireya TuP03:1 Spak, Fredrik TuW16:6 Scavone, Lucila MoS12:3; We804:4 Spindola, Thelma TuP01:1 Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schimmel, Wendela TuW03:1 Squadroni, Rosa MoS08:5 Schleifer, Laurence MoW08:3 Stane	Sanders, Karin	SuW10:4	Sivochalova, Olga V	TuP03:2
Saranto, Kaija TuW10:2; MoW06:1 Sjögren, Elaine TuW16:4 Sarkar, Shrabanti MoW07:5 Skalle, Nina-M Kristian MoW10:2 Sarpong Yaw, Joseph SuW08:3 Skervfing, Staffan TuW08:1 Saurel-Cubizolles, Marie-Josèphe WeW01:3 Slapsyte, Grazina SuP04:3 Savikko, Annukka TuW16:6 Smith, Kevin TuW17:3 Savinainen, Minna MoW12:1 Smith, Thomas J MoW03:1 Savitz, David MoW09:4; MoW12:4 Soares, Angelo TuW16:3 Sazonova, Tatiana MoP01:3 Sogoré, Bagayoko Mariam WeS03:1 Scaravelli, Giulia TuW15:3 Sonntag, Ute ToP06:4 Scavone, Lucila MoS12:3; WeS04:4 Spindola, Thelma TuP01:3 Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schimmel, Wendela TuW03:1 Squadroni, Rosa MoS08:5 Schleifer, Laurence MoW08:3 Standing, Hilary SuW07:4 Scutaru, Birgitte TuP02:1 Stanescu, Rodica MoP02:1 Seifert, Ana Maria TuS09:2; SuW06:2 <td>Sanhueza, Olivia</td> <td>TuW14:1</td> <td>Siziba, Margaret</td> <td>ToP06:1</td>	Sanhueza, Olivia	TuW14:1	Siziba, Margaret	ToP06:1
Sarkar, ShrabantiMoW07:5Skalle, Nina-M KristianMoW10:2Sarpong Yaw, JosephSuW08:3Skervfing, StaffanTuW08:1Saurel-Cubizolles, Marie-Josèphe WeW01:3Slapsyte, GrazinaSuP04:3Savikko, AnnukkaTuW16:6Smith, KevinTuW17:3Savinainen, MinnaMoW12:1Smith, Thomas JMoW03:1Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scavone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW03:4Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04	Sanotski, Igor	TuP04:5	Sjögren, Bengt	TuP02:6
Sarpong Yaw, JosephSuW08:3Skervfing, StaffanTuW08:1Saurel-Cubizolles, Marie-Josèphe WeW01:3Slapsyte, GrazinaSuP04:3Savikko, AnnukkaTuW16:6Smith, KevinTuW17:3Savinainen, MinnaMoW12:1Smith, Thomas JMoW03:1Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:1	Saranto, Kaija	TuW10:2; MoW06:1	Sjögren, Elaine	TuW16:4
Saurel-Cubizolles, Marie-Josèphe WeW01:3Slapsyte, GrazinaSuP04:3Savikko, AnnukkaTuW16:6Smith, KevinTuW17:3Savinainen, MinnaMoW02:1Smith, Thomas JMoW03:1Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuP01:1Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:1	Sarkar, Shrabanti	MoW07:5	Skalle, Nina-M Kristian	n MoW10:2
Savikko, AnnukkaTuW16:6Smith, KevinTuW17:3Savinainen, MinnaMoW012:1Smith, Thomas JMoW03:1Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:1	Sarpong Yaw, Joseph	SuW08:3	Skervfing, Staffan	TuW08:1
Savinainen, MinnaMoW12:1Smith, Thomas JMoW03:1Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Saurel-Cubizolles, M	arie-Josèphe WeW01:3	Slapsyte, Grazina	SuP04:3
Savitz, DavidMoW09:4; MoW12:4Soares, AngeloTuW16:3Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Savikko, Annukka	TuW16:6	Smith, Kevin	TuW17:3
Sazonova, TatianaMoP01:3Sogoré, Bagayoko MariamWeS03:1Scaravelli, GiuliaTuW15:3Sonntag, UteToP06:4Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Savinainen, Minna	MoW12:1	Smith, Thomas J	MoW03:1
Scaravelli, Giulia TuW15:3 Sonntag, Ute ToP06:4 Scarone, Mireya TuP03:1 Spak, Fredrik TuW16:6 Scavone, Lucila MoS12:3; WeS04:4 Spindola, Thelma TuP01:3 Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schimmel, Wendela TuW03:1 Squadroni, Rosa MoS08:5 Schleifer, Laurence MoW08:3 Standing, Hilary SuW07:4 Scutaru, Birgitte TuP02:1 Stanescu, Rodica MoP02:1 Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6	Savitz, David	MoW09:4; MoW12:4	Soares, Angelo	TuW16:3
Scarone, MireyaTuP03:1Spak, FredrikTuW16:6Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Sazonova, Tatiana	MoP01:3	Sogoré, Bagayoko Mari	am WeS03:1
Scavone, LucilaMoS12:3; WeS04:4Spindola, ThelmaTuP01:3Schéele, PatrikMoW12:2; SuW05:6Sprusinska, ElzbietaWeW03:5Schimmel, WendelaTuW03:1Squadroni, RosaMoS08:5Schleifer, LaurenceMoW08:3Standing, HilarySuW07:4Scutaru, BirgitteTuP02:1Stanescu, RodicaMoP02:1Seidler, AndreasMoW03:4Starrin, BengtTuW16:2Seifert, Ana MariaTuS09:2; SuW06:2Stellman, JeanneTuW02:6; WeW01:2Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Scaravelli, Giulia	TuW15:3	Sonntag, Ute	ToP06:4
Schéele, Patrik MoW12:2; SuW05:6 Sprusinska, Elzbieta WeW03:5 Schimmel, Wendela TuW03:1 Squadroni, Rosa MoS08:5 Schleifer, Laurence MoW08:3 Standing, Hilary SuW07:4 Scutaru, Birgitte TuP02:1 Stanescu, Rodica MoP02:1 Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Scarone, Mireya	TuP03:1	Spak, Fredrik	TuW16:6
Schimmel, Wendela TuW03:1 Squadroni, Rosa MoS08:5 Schleifer, Laurence MoW08:3 Standing, Hilary SuW07:4 Scutaru, Birgitte TuP02:1 Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Scavone, Lucila	MoS12:3; WeS04:4	Spindola, Thelma	TuP01:3
Schleifer, Laurence MoW08:3 Standing, Hilary SuW07:4 Scutaru, Birgitte TuP02:1 Stanescu, Rodica MoP02:1 Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Schéele, Patrik	MoW12:2; SuW05:6	Sprusinska, Elzbieta	WeW03:5
Scutaru, Birgitte TuP02:1 Stanescu, Rodica MoP02:1 Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Schimmel, Wendela	TuW03:1	Squadroni, Rosa	MoS08:5
Seidler, Andreas MoW03:4 Starrin, Bengt TuW16:2 Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Schleifer, Laurence	MoW08:3	Standing, Hilary	SuW07:4
Seifert, Ana Maria TuS09:2; SuW06:2 Stellman, Jeanne TuW02:6; WeW01:2 Seki, H TuP01:1 Stellman, Steve WeW01:2 Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Scutaru, Birgitte	TuP02:1	Stanescu, Rodica	MoP02:1
Seki, HTuP01:1Stellman, SteveWeW01:2Serfen, Anna MariaWeW05:4Stenlund, HansWeW03:3Sgorbissa, FedericaTuW15:3Stewart, D EWeS02:4Shamian, JudithMoP05:1Stoica, LigiaTuP02:2; MoP03:6Sharma, GunjanTuW18:4Stone, RoslynMoW03:1Shaw, AndreaSuW06:3Suciu, GloriaSuP04:1; TuP03:6Shenglan, TangSuW07:4Sulova, LenkaMoW06:2	Seidler, Andreas	MoW03:4	Starrin, Bengt	TuW16:2
Serfen, Anna Maria WeW05:4 Stenlund, Hans WeW03:3 Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Seifert, Ana Maria	TuS09:2; SuW06:2	Stellman, Jeanne	TuW02:6; WeW01:2
Sgorbissa, Federica TuW15:3 Stewart, D E WeS02:4 Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Seki, H	TuP01:1	Stellman, Steve	WeW01:2
Shamian, Judith MoP05:1 Stoica, Ligia TuP02:2; MoP03:6 Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Serfen, Anna Maria	WeW05:4	Stenlund, Hans	WeW03:3
Sharma, Gunjan TuW18:4 Stone, Roslyn MoW03:1 Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Sgorbissa, Federica	TuW15:3	Stewart, D E	WeS02:4
Shaw, Andrea SuW06:3 Suciu, Gloria SuP04:1; TuP03:6 Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Shamian, Judith	MoP05:1	Stoica, Ligia	TuP02:2; MoP03:6
Shenglan, Tang SuW07:4 Sulova, Lenka MoW06:2	Sharma, Gunjan	TuW18:4	Stone, Roslyn	MoW03:1
	Shaw, Andrea	SuW06:3	Suciu, Gloria	SuP04:1; TuP03:6
Shivdas, Meena MoS09:4 Sumbwanyambe, Michael SuP04:2	Shenglan, Tang	SuW07:4	Sulova, Lenka	MoW06:2
	Shivdas, Meena	MoS09:4	Sumbwanyambe, Micha	nel SuP04:2

Sundaram, Vanita	TuW13:7; TuW13:6	Triemer, Antje	TuS11:5
Sundgren Grinups, Be	erit SuW07:2	Triponiene, Dalia	MoP04:4
Surcel, Didi	TuP02:2	Triponis, V	MoP04:4
Swanson, Naomi	MoW08:3; TuW02:6	Trollvik, Marie	WeS01:1; WeS01:2
Swanson, Naomi G	TuW04:2	Tsobanoglou, George	TuW09:4
Sverke, Magnus	SuS08:4; SuS08:5	Töyry, Saara	TuW15:5
Svärd, E	WeS05:1	Uchikune, Masashi	SuP04:4
Szedmák, Sándor	SuW05:3	Waerness, Kari	SuS01:2
Sätterlund Larsson, U	Ilabeth SuP03:1	Valenzuela, Sandra	TuW14:1
Sökjer-Petersen, Mari	anne TuS06:3	Waling, Kerstin	MoW04:2
Ta Tuyet, Binh	TuW03:5	Valls-Llobet, Carme	WeS02:6; MoW03:6
Taal, Hilja	TuW17:5	van Daalen, Geertje	SuW10:4
Taib, Ahmed Ali	MoW03:2	van Lierop, Birgitte	MoS15:3; MoS15:4
Tamrakar, Nigma	SuS09:2	van Rijswijk, Karen	TuP01:2; WeW02:5
Taraban, Svitlana	SuW02:5	Vaquerano Castro, Bes	sie Dinora TuP04:3
Tattersall, Andy	MoW08:2	Varallyai, Klari	MoP02:2
Tavassi, S	MoP01:2	Vardeu, Francesca	SuW02:2
Taylor-Piliae, Ruth	SuW01:3	Weber, Tracy	WeW01:2
Tazoglou, Evanthia	SuW11:3	Veide, Arturs TuP05	:5; TuP04:1; TuP04:2
Tenekeci, Ilknur	WeW05:5	Verrier, S	SuP02:2
Teschke, K	SuW02:3	Westberg, Hanna	MoS04:5; TuS10:1;
Tesoka, Sabrina	SuS06:1		TuS10:2
Thebaud-Mony, Anni	e MoS12:1	Westerberg, Bengt	MoS13:1; MoS13:4
Theobald, Sally	SuP01:6; TuW05:3		MoW05:2; MoW05:3
Theorell, Töres	SuP03:1; WeW03:4	Westring Nordh, Mari	
Thibault, Mone-Chris	stine MoW12:3	Vianna de Oliveira, Ida	
Thornley, Carole	MoW01:1	Vieira, Sarita	WeW01:4
Thurshen, Meredeth	MoS12:2	Wigaeus Tornqvist, Ew	
Tilly, Chris	TuS01:5	Viitasara, Eija	MoP05:3
Tint, Piia	SuW08:1	Wiktorin, C	TuW03:2
Todea, Adriana	TuW17:2	Willemsen, Tineke M	SuW10:4
Tolhurst, Rachel	SuW07:4	Winants, Y	MoW13:4
Toomingas, Allan	MoS08:3	Vingård, Eva	TuW07:2
Torén, K	TuW14:3	Winkel, J	TuS02:3
Torgén, Margareta	MoW13:5; TuW17:3	Viragh, Eniko	TuP02:5
Torkelson, Eva	MoW08:1	Wittich, Andrea C	MoW09:6
Torstensson, Britt-Ma	rie TuS10:3	Vogel, Laurent	MoS11:1
Tran, Phuong Mai	MoW09:5	Vogt, M S L	MoP02:4
Tran Mai, Huong	MoW01:4	Voss, Ursula	SuS04:4

Voziyanova, Helene	TuS08:2	Zhukova, Lubov T	MoP06:5
Vu Bich, Hoat	TuW03:5	Zhuraleva, Irina	SuW03:4
Xu, Qian	SuW07:4	Zoike, Erika	MoP04:2
Yamazaki, K	TuP01:1	Zülch, Gert	WeW04:3
Yang, Yong	MoS10:4	Zuskin, Eugenia	MoP02:3
Yilbar, Berrin	TuS11:4	Åberg, Berit	MoS01:4
Ylipää, Viola	MoP05:2	Äärimaa, Markku	TuW15:5
Youk, Ada O	MoW03:1	Öhman, Ann	WeW03:3
Yue Lee, Francis Chun	MoS10:4	Östergren, Per-Olof	TuS02:2; TuS02:5;
Zanariah,	TuW05:2		TuS02:6; TuS02:1;
Zengin-Arslan, Berna	TuW02:1	Ö il Di 1	TuS02:3
Zeytinoglu, Isik Urla	SuW07:3	Ostlin, Piroska	MoS09:1
Zhukov, V V	MoP06:5		