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Migration and work-related health – a survey

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SAL TSA – JOINT PROGRAMME
FOR WORKING LIFE RESEARCH IN EUROPE

The National Institute for Working Life and The Swedish Trade Unions in Co-operation

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SALTSA is a collaboration programme for occupational research in Europe. The National Institute for Working Life in Sweden and the regional trade union organisations SACO (the Swedish Confederation of Professional Associations), LO (the Swedish Trade Union Confederation) and TCO (the Swedish Confederation of Professional Employees) take part in the programme. Many problems and issues relating to working life are common to most European countries, and the purpose of the programme is to pave the way for joint research on these matters from a European perspective.

It is becoming increasingly obvious that long-term solutions must be based on experience in and research on matters relating to working life. SALTSA conducts problem-oriented research in the areas labour market, employment, organisation of work and working environment.

SALTSA collaborates with international research institutes and has close contacts with industry, institutions and organisations in Europe, thus linking its research to practical working conditions.

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Motives

Migration is a many-faced phenomenon, ranging from inter-continental mass movements to residential moves between neighbouring communities and including everything on the scale between these extremes. *Mobility*, in a wider sense, includes migration but comprises both moves within administrative units and cyclical processes (e.g. recurrent moves back and forth, and re-migration). Measuring and analysing migration and other forms of spatial mobility is difficult, partly because of imperfect definitions, partly because of incomplete data, but partly also because of the phenomenon's own dynamics, which tends to make it elusive.

The incitements behind migration may have to do with private affairs or with social, political or natural conditions in the home environment. *Work-related* spatial *mobility* covers not only migration for employment (permanent residential moves and seasonal migration) but also regular moves between home and work-place (commuting) and temporary assignments in other places than the normal place of work. Everyone's need to make a living somewhere and employers' wish to send out workers and representatives are two sides of work-related mobility.

There is a substantial body of scientific literature on various aspects of migration, including *health*, but although migrants and non-migrants have been compared from time to time in epidemiological, sociological and geographical research projects, the constellation of *work-related* health and migration is rarely encountered. Yet, in the SALTSA context of work environment and health in a European perspective this theme is very relevant. Not only is the topic relevant as such, but it has more or less distinct connections with other SALTSA projects and potential projects, notably those dealing with "the new working life", criteria for the work-relatedness of disorders, work environment management and the ever more flexible working life and its consequences.

Migration and other kinds of mobility are, as such, not phenomena that can be directly included in the term "work environment" apart from the fact that people are always components of each other's work environment. Nevertheless, there may be strong reasons for elucidating and exploring relations between migration, work environment and health, as well as potential legal aspects of mobility. Residential moves might imply real social, ergonomic or communication problems with health consequences for the movers themselves but also methodological complications for research.

Firstly, mobility entails encounters between people and cultures – also in work situations. The encounters themselves between people with different ethnical backgrounds, values and other characteristics implies a change of the *social – human – working environment*. Increasing the cultural and ethnic

diversity of working-places, migration also entails a challenge for occupational health services and work environment management.

Secondly, it can be imagined that moving involves certain risks as a consequence of *information and communication* problems. Those who move cannot always be aware of the rights and duties in work situation – including those relating to working environment, health and safety – that apply at the new workplace or in the new host country. Deficient language proficiency might increase the difficulties.

Thirdly, movers might come to working conditions that have not been designed considering their *different cultural, social and physical characteristics*. Workplaces might have to be adjusted to these characteristics, including health problems underlying the residential move itself.

Further, mobility entails *methodological* problems for the epidemiological research seeking causes for ill-health following protracted exposure or long periods of latency. Previous research has displayed marked differences in health and disease patterns for different population groups. Increasing mobility might therefore lead to geographical redistribution of cases of ill-health.

For many reasons, inter-European labour migration motivates a *quest for common rules and regulations* (criteria) concerning work-related health and disorders. Mobile workers claiming insurance benefits may have been exposed in several work-places and in two or more countries throughout working life.

Finally, present-day trends, sometimes summarised in the expression “the new working life” have opened possibilities for *rearrangements of work in space and time*. Thus, a phenomenon like teleworking tends to loosen individual ties to a certain physical work place. The emerging picture of teleworking is fragmented and incomplete. It could reduce daily commuting but it could also widen the choice of housing and might eventually set off large-scale spatial re-arrangement of dwellings. Another aspect of the new working life is the increasing number of fixed term contracts. Quite conceivably, fixed term contracts appearing in succession could induce frequent residential moves for the persons concerned. Since the dynamics of working life in this sense can be expected to increase there may be good reasons to consider the alternatives to migration in present-day changing working life.

Therefore, exploring connections between mobility and health, with particular emphasis on working conditions is an urgent task.

Concepts

Most people, probably, associate the term “migration” with *international* relocation of people, including labour migrants as well as refugees. This is indeed a major force of change, affecting working life and other aspects of society.

More precisely though, *migration* is defined as residential moves across an administrative border, which can just as well be a municipal or county border as international borders between states. *Mobility* is a wider concept which includes migration but comprises both moves within administrative units and cyclical processes, e.g. recurrent moves back and forth, and re-migration. Thus, seasonal moves and in principle also commuting, are included in the term mobility. Temporary assignments involving stationing in other places on account of projects or other short-term employment are also included in the wider concept mobility.

The problem of definition is elaborated in the following quotation:

A classification of spatial movements of population

	Recurrent	Non-recurrent
Local	A	C
Extra-local	B	D

“The term ‘mobility’ is the most general in the field. *Spatial mobility*, embracing all sorts of territorial movements, should be distinguished from *social mobility*, a term extensively used by sociologists for changes in socio-economic status. But all forms of spatial mobility cannot be regarded as migration. Of the four categories shown in a simple typology of spatial mobility ... only category D would universally be accepted as migration. Category A largely comprises commuters, involving no change in residence. Category B includes the movement of seasonal or temporary workers, some seasonally nomadic pastoral groups, and also students moving termly between family home and college; such movements are often designated as circulation, which covers ‘a great variety of movements, usually short-term, or cyclical in character, but all having in common the lack of any declared intention of a permanent or long-lasting change in residence’. ... Category C embraces, above all, intra-urban residential relocation, the dominant category of residential movement within developed countries ...”

(Jones: *Population Geography* 1990)

An occurring related term is “relocation”. This term can include the moves which are caused by change of workplaces for a longer or shorter period in conjunction with career steps of temporal foreign assignments.

Even if migration thus may appear to be well defined in theory there are other dimensions to consider. One such dimension has to do with the *legal status* of

migrants and other movers. Those persons who are legally resident in other countries than their home countries constitute a proportion (which cannot be readily estimated) of the total number of foreigners in the country.

Another dimension has to do with the *period of residence* in the host country or the host place. Time itself can also be essential as an explanatory variable. On one hand a longer period of residence – and longer time in a work place – implies longer exposure to a certain environment including potential health hazards. On the other hand the temporal perspective might have a psychological impact on the migrant or mover inasmuch as a period of service in an unfamiliar place can be less trying if it can be terminated than an involuntary exile for an indefinite period.

Concepts

- *spatial mobility*: all moves, including commuting, travelling and seasonal or other cyclical changes of place of residence
- *residential mobility*: change of residence, even *within* an administrative geographical unit, e.g. a municipality
- *migration*: residential moves across administrative borders, also within countries
- *international migration*: residential moves across borders between states
- *relocation*: (Sw. omlokalisering, förflyttning): moves that cannot readily be characterised as migration, e.g. a temporary assignment in another place than the regular place of work and residence or an occasional semester abroad for students. Fleeing, too, can, if the refugee hopes to return home, be considered as a kind of relocation distinguished from migration.

International and national concerns

Little enough can be found about migrants, work and health in international conventions and programmes. Some remarks can be made, though.

The global perspective

A new version of the comprehensive WHO policy “Health for all” was adopted in 1998. Its European edition “Health 21” emphasises 21 targets to be reached by the year 2020. In the opening chapter migration is mentioned as one component in the changing epidemiological situation of Europe:

“In considering the future health of Europe, it is also important to recognize areas of uncertainty. Most significant in this respect are phenomena such as migration and social conflict.”

The WHO policy is based upon a “life course approach”, targeting certain “critical periods in human development”. Although the list of critical periods does not mention migration, “critical periods” include events which may be connected with migration, for example leaving parental home; establishing own residence; entry to labour market; job insecurity, change or loss and exit from labour market. It is also recognised that ethnic minorities, including migrants, are at particular risk of poor health status, but no connection is made between their health status and working conditions.

A few ILO *conventions and recommendations* have been adopted to safeguard the interests of migrant workers. The conventions, however, mainly cover circumstances of recruitment, remuneration and other employment conditions but have little to say about health and working conditions. Health aspects are mainly mentioned in connection with the provision of medical services to ascertain that migrants are in good health at departure and arrival and that they enjoy good hygienic conditions during their journeys. The 1975 recommendation (R151), though, lays upon the member states a responsibility to treat migrants and their own nationals equally in terms of working conditions, including occupational safety and health. It also imposes upon the members to ensure that migrants workers receive sufficient training and instructions in occupational safety and hygiene, but no details are specified in the recommendation text. Another recommendation (R100) pays particular attention to the protection of migrant workers in underdeveloped countries, emphasising medical supervision, assistance in cases of accidents and special training and instruction of migrant workers.

ILO *publications* on migration emphasise labour market, discrimination and employment aspects but do not explicitly cover the working conditions and health of migrants.

The European perspective

What kind of actual situations involving migrants and potentially work-related health problems in present Europe seem to warrant research?

For one thing, free movement for people on a unified labour market is one of the cornerstones of European integration. For another there is a potential immigration pressure from the surrounding world challenging the EU political ambition to follow one external migration policy.

Free movement is officially viewed as a fundamental right but also as an instrument for achieving cross-cultural interchange and cultural integration as

well as means for correcting regional imbalances and inequalities. Internal migration is facilitated and even encouraged by regulation of social protection, recognition of formal qualifications, information about employment and special mobility schemes. In addition to this intentional mobility other forces must be considered – for one thing, an extensive structural change is going on with geographical effects implying residential moves within European countries and, for another, immigration from countries outside the Union. It can easily be imagined that economic structural changes in the European economy and economic geography will affect inter-European migration patterns. (Dunford 1994, Amin & Tomaney 1995, Leat 1998, Youds, 1999)

Broadly speaking, several different trends can be distinguished in present European population flows. Firstly, there is a continuation of previous flows, including work migration. Secondly, refugees and asylum seekers have gradually become the dominant component of the picture. Thirdly, a flow of mostly illegal immigrants has set in to Southern Europe from other Mediterranean countries. Fourthly, during the 1990s a considerable flow of migrants from the East to the West in Europe has been added to the pattern. (Brochmann p. 33)

1. From a marginal level at least since 1960, immigration in the EU countries increased during the latter years of the 1980s. The increase of foreign citizens in the EU countries was mainly due to immigration from countries outside the union. Between 1985 and 1995 the number of foreign citizens increased from 7.5 million to 12 million, while the number of EU citizens living in other EU countries increased modestly from 5.2 to 5.5 million. These changes occurred essentially before 1992. All in all, 5 percent of the inhabitants in the European Union are citizens of some other country, which for 3.8 million percentage units means some country *outside* the union. (Eurostat pp. XII and 59)
2. The number of *asylum seekers* in EU countries has varied considerably. It increased markedly between 1987 and 1992. During the following years a flow of refugees from ex-Yugoslavia was added.
3. For rather obvious reasons, the number of illegal immigrants is unknown, but it is estimated to be substantial, particularly in Southern Europe.
4. Also in Central and Eastern Europe, demographic changes have occurred. Fertility has dropped. Since the borders of the region were opened after the dissolution of the Soviet Union new international migration flows have emerged and for most countries emigration exceeds immigration. It has been estimated that 4 million people have emigrated between 1989 and 1994 as a consequence of the opening of the borders in Eastern Europe. Further,

approximately 5 million people have fled from the wars in ex-Yugoslavia. (Koser & Lutz, p. 1)

From a different point of view, new patterns of mobility in Europe have been characterised as

- circulatory or rotational migration
- border or travelling trade
- three months' work tourism
- daily commuting between home and work
- sex trade and matrimonial agency activities

(Knocke p. 56)

Some of these categories reflect special problems. Others tell of mobility, that may not be completely recorded. Thus, included in the mobility pattern in a wider sense is the *commuting* that takes place within as well as between member states. European integration makes international commuting possible – i.e. regular journeys between home and work across intra-union borders.

A more recent phenomenon – the increasingly evident flexibilisation of working life which among other things implies temporary employment and unconventional arrangements of work in both time and space – might bring about new patterns of mobility and travelling as well as more frequent changes of work and work environment. For example, the extent of commuting might decrease.

In the wake of these movements social and demographic changes follow. Thus, in contemporary Europe with extremely low fertility and in some countries “negative natural population increase”, migration is of great importance to demographic change. The largest groups of immigrants (in relation to the populations of the host countries) come to Luxembourg, Germany, Austria and Sweden. In other member countries the proportion is less than one percent per year. The greatest numbers of immigrants come to Germany and Great Britain. (Eurostat p. XIII)

Also, a polarisation of mobility – a contrast between professional groups – has become evident. Highly educated movers, who used to be “invisible”, since they often moved temporarily and rarely caused any social problems, (Koser & Lutz p.7–8) now constitute a large portion of the internal EU movers as well as among the refugees from outside the union. At the same time many poorly educated people move to Europe from other continents.

The European Foundation for the Improvement of Living and Working Conditions has addressed migration-related problems mainly in terms of discrimination at workplaces and also in view of social cohesion in a wider sense (Pickup), but so far no attempt has been made to study the health aspect.

In order to reach the health targets, “Health 21” (WHO) specifies operational objectives and points out several requirements that should be met. Particularly interesting among these requirements are the needs to integrate the health sector (where no mention is made of occupational health services), to strengthen partnerships for health and social development (including cities, schools and workplaces) and to harmonise data collection systems for monitoring health progress.

The national – Swedish – perspective

From the national perspective increasing migration is changing the epidemiological context. For example Swedish nationals working abroad might encounter different risks while immigrants, being used to other cultural contexts and working conditions, face unfamiliar situations in Sweden. In spite of certain research efforts and statistical production, knowledge about the health status in different groups and its potential connection with work and national or ethnical origin is often crude and insufficient.

Research on migration, health and working environment

This study is largely based on a search for literature and other kinds of information about the state of the art of research on migration and work-related health. What information can be extracted from the known literature? And what has been discovered in communication with researchers?

Scanning of literature leaves the impression that research focusing migration and work-related health, respectively, rarely seem to meet. Other researchers support this impression. (Döös 1990, 1990 and pers. comm., Luo & Cooper 1990)

On top of the search for relevant literature, institutions conducting research on migration have been searched in Sweden as well as abroad. The immediate impression is that the emphasis of their activities is laid on documentation and analysis of mobility flows and exploration of cultural identities and conflicts, while there is little if any concern with health and working conditions. (See appendix 2 for a list of selected institutions.)

Research on mobility and health

Roughly speaking, current research on mobility and health can be subdivided in three categories:

- migration medicine
- immigrant research
- research on assignments and relocation

A. *Migration medicine*

As concept “migration medicine” is rather new. In Sweden the Medical Research Council established a planning group for migration medicine in 1993. (Hjern) A wider concept is “travel and migration medicine” which also covers health problems which are related to temporary stays in unfamiliar environments. (Mårdh)

In epidemiological literature, at least since the 1950s, several examples of studies of ill-health and health conditions among various migrant groups compared to resident populations can be found. Migration offers “natural experiments” which are welcomed by epidemiologists.

B. *Immigrants and health*

Research on the health of “immigrants” (Sundquist 1998) starts from potential differences between groups of people who can be more or less readily distinguished from a majority population. Sometimes, the term “minority medicine” is applied, which is a wider concept, since it can also cover domestic minorities.

Those health problems that can be observed among movers can be either relocated (i.e. they had set in before the move), be directly connected with the move itself (*migration-related*) or be “*acquired*” (i.e. have originated) in the new place.

1. “*Relocated*” health problems may be infectious diseases contracted in the country of origin but also genetically conditioned disorders. (Hjern pp. 10, 24; Sundquist 1994, p. 19ff). They can also be diet-related, e.g. deficiency diseases (Hjern pp. 19ff). By comparison much research has been devoted to these aspects, not least as comparative epidemiological studies which relate immigrant groups to domestic population groups.

One aspect which does not seem to have been observed until recent years is the post-traumatic stress syndrome (PTSD) with agony, chronic pain, disturbed sleep and sexual disturbances, arising from traumatic experiences (war, torture and other kinds of violence), which have been the direct motives for flight and migration. (Hjern pp. 10, 29ff; Sundquist 1994; Ekblad, Westin). The problem may appear as new for two reasons. For one thing the category of movers in question is perceived as new and, for another, professionals encountering these individuals are often unfamiliar with the type of disorders.

2. Health problems can be related to the migration itself – *migration-related*. The residential move – the departure from a familiar place and the encounter with an unfamiliar environment – implies strain and psychological stress. (Hjern p. 27)

3. Acquired health problems in the host country are such disorders that are caused by the new environment, including working conditions, coupled with personal

inability to handle alienation and isolation, often including unemployment.

Health problem may arise as a consequence of lower tolerance levels and higher sensitivity to environmental conditions. (Aurelius & Moëll, p. 4) Problems belonging to this category are work injuries and work-related disorders. Those research ventures with an orientation towards migration that can be found are, above all, focusing unmistakable accidents, rather than work-related ill-health. Several studies point at differential accident risks between immigrants and native workers and usually – but not always – higher accident rates among the former. On closer inspection, though, doubts arise about the reliability of such investigations, for example because they do not pay enough attention to work tasks, industrial branches, severity of accidents, job experience etc. There are also indications that the length of residence in the country plays a role. (Döös et al 1993, Aurelius & Moëll, Bruun, Næss)

Another problem which apparently has arisen in the host country originates in the circumstances that workplaces in Sweden and the rest of the EU may not always be suited to non-European ethnical groups – to cultural, physiological and anatomical differences. Neither are resident workers generally prepared to encounter fellow workers and colleagues with post-traumatic stress syndromes. Some causes behind both the difficulties to find jobs and work-related health problems experienced by immigrants might be found in this complex. (Ekblad, pers. comm) More information is likely to be gathered from centres for medical treatment of refugees and rehabilitation centres for victims of torture (Hjern s 30)

C. Working abroad, foreign assignments

The inverted problem – as compared to “immigrant research” – is made up of investigations probing the health status of workers from industrial and post-industrial economies who are stationed abroad or who have otherwise been relocated and how it is influenced by the geographical and cultural change. (Anderzén & Arnetz, Anderzén et al, Luo & Cooper, Mendenhall & Oddou; Black, Mendenhall & Oddou, Munton & Forster)

There seems to be a growing interest in how family conditions and other social circumstances affect the persons involved in cases of work-related relocation. (Luo & Cooper). Both researchers and others who encounter personnel stationed abroad have been able to observe stress and disturbances in family life. Two types of health problems have been pointed out in such cases, namely coronary heart disease and behavioural disturbances for accompanying teenagers. (Luo & Cooper p. 122)

Studies have been made showing that relocations primarily occur among high-ranking employees. Luo & Cooper maintain, however, that the attitudes towards

relocation has changed and it is not self-evident that such changes should be seen as a benefit and a career step.

A couple of models for analysing stress in connection with work-related relocation have been presented. (Mendenhall & Oddou, Luo & Cooper)

Problem description/conceptualisation

– a simple structure

Assuming that spatial relocation entails a change of health-relevant exposure, a very simple tentative model could consist of the following chief components:

- Pre-migration circumstances.
- The migration process, including forces behind the migratory step
- Post-migration circumstances
- Health outcome
- Alternatives to migration and potential health outcome

1. *Pre-migration circumstances* include the individual's genetic set-up, the social environment, pre-existing disorders as well as exposure at work, at home and elsewhere. In short, pre-migration circumstances include all aspects of normal life in the home country, some of which may affect the individual's health in the long run. However, *forces behind the migratory steps* ought to be considered as a separate sub-category of components in the pre-migration setting. Living and working conditions may be incitements for migration. Exposure might include traumatic events (e.g. persecution, torture and disasters).

2. In a physical sense *migration* can be envisaged as a journey, beginning with take-off and ending with arrival at the destination. Nevertheless, the actual migration process can be thought of as beginning with preparations and ending with the insight that the step was final and irreversible. It is easily realised that this is by no means a completely clean-cut event or sequence of events. Even before the actual move has taken place or the decision to move has been made there will be an incitement of some kind. Reasons for migration can be employment-related (opportunities, structural changes), external – not employment related (e.g. disasters) or personal (family reasons).

Arrival at the destination is likely to be followed by a period of acclimatisation, adaptation and, possibly, integration or assimilation. Consequently, the migration phase can hardly be defined and delimited in an unambiguous way.

3. *Post-migration circumstances* include some unchangeable factors that are tied to the individual (e.g. genetic setup), but also the social environment (language, contacts, “culture”) and the physical setting (e.g. climatic conditions and buildings) of the host country.

The concept of entitlements has been suggested to cover “all those commodities that a person can command under certain legal, political and economic circumstances.” Moving from one country to another often means a radical change of entitlements, potentially affecting health:

“... the health level of an individual in a society is determined by his or her ownership of and exchange entitlements, which determine his or her working or living conditions, as well as the possibility of purchasing health care or making use of the available health services. Migrants and ethnic minorities, and in particular newcomers and specific ethnic groups, have reduced entitlements in the host societies. Not only are they exposed to poor working and living and working conditions, which are per se determinants of poor health but they also have reduced access to health care for a number of political, administrative and cultural reasons, which are not necessarily present for the native population, and which vary in different societies and for different groups. Language, different concepts of health and disease, or the presence of racism are examples of such selective barriers.” (Bollini & Siem).

4. *Health outcome*, of course, comprises all the same aspects of health and ill-health that are considered in other epidemiological contexts. This aspect will be developed in the following section.

5. On this point, however, it might be appropriate to turn the perspective and consider the *alternatives*. We are assuming that migration will have some effect on the migrants’ health. But would it not be relevant to consider potential health effects from *not* moving?!

Moving from a disadvantaged, marginalised, recession area to an area of opportunities involves financial and human costs – which might cause a selection effect (Pickup p. 34). Then, would remaining in the home area have a more or less favourable effect on health? It may be that such questions cannot be answered unambiguously, but alternatives, appearing in real life, could be analysed and evaluated. Thus, conceivable alternatives to permanent residential moves are e.g.

- teleworking
- long-distance commuting (e.g. weekly commuting)
- cross-border commuting

In this same context, it is also appropriate how the *family members* of migrant workers (accompanying or remaining at home) are affected in health terms by the migration situation – and how the family support affects the migrant’s well-being. (See Munton & Forster)

Health outcome – problems and ill-health measurements

The topic – migration, work and health – is immense, covering virtually every conceivable kind of disorder, profession, occupation, branch, type of work and work situation component as well as ethnical or national groups. Health status is also a complex phenomenon and the emerging pictures may be quite different, depending on which component or relationship one chooses to observe. Obviously, there is no comprehensive body of knowledge about (work-related) health and migration – to say nothing of the causal circumstances. Fragmented information is available in the form of articles, official reports, academic papers and proceedings. Allegedly, however, a comprehensive book on migration and health, written by Paul Boyle, will be published later this year.

Various indicators of health status can be imagined and have occasionally been used to describe the general health situation of migrant groups as well as other social categories. For migrants, a few broad categories of disorders and general measures have received more attention than others. The following overview is by no means intended to give a full account of the complex, but rather to present some types of indicators and the methodological problems attached to them.

Sickness leave

Sickness leave might be perceived as frequently work-related but conceivably also as related to cultural contexts. A comparison, based on countries of birth, has revealed not only that the average sick leave level of foreign-born workers in Sweden is 70 % higher than the average of native Swedes but also that there are considerable differences between foreign nationalities and genders. Thus, it turned out for example that certain national groups living in Sweden have indeed sickness leave levels below that of the Swedes. (Kindlund) But crude rates may be spurious. Considerable variations have been revealed when age and duration of the sick leave are accounted for (Paulson)

Similar findings have been reported from other European countries. (Bollini & Siem) Actual causes are probably very complex. (Kindlund 1998, Paulson; RFV 1990; RFV 1996)

Utilisation of health care

Reasonably, actual utilisation of health care could be perceived as a measure of health status. For several reasons this not be the case. Thus, it has been suggested that cultural background plays an important role for the apparent pattern of ill-health, since different ethnical or national groups (as well as different social groups, generations etc) may be more or less apt to seek professional medical help. (Löfvander) It has also been shown in an empirical study from Britain that apparent accident-proneness can be distorted by differential inclination to use preventative treatments for which visits to occupational health services are necessary. (Lee & Wrench)

In European countries it has been documented that migrants and ethnic minorities do not utilise health services to the extent that could be expected. (Bollini & Siem) From Canada it is reported that immigrant groups in general tend to utilise health care services less frequently than native residents, to terminate the treatment earlier and to receive poorer service. (Elliott & Gillie) Other studies show that migrant and refugee communities often develop social networks and “alternative” institutions which provide welfare services, drawing upon the resources available within the sub-culture. (Johnson 1998) A more diversified picture can also be obtained when “utilisation of health care” is split into out-patient and in-patient care, consumption of drugs etc. (Ekberg)

Premature retirement and disability

Premature retirement is one indicator that can easily be imagined to be work-related. As a measure, however, premature retirement can be a very deceptive indicator of actual health status. Thus, it is also easy to imagine a cultural component behind the pattern. Further, the labour market situation sometimes tends to affect the retirement decisions. New cases of premature retirement have recently been shown to be twice as frequent among foreign-born workers as among native Swedes (Kindlund). In a more limited study, immigration and low socio-economic status have been shown to be predictors of early retirement. (Edén et al. 1995). Occupational structure RFV (1996)

Allegedly, official statistics of disability tend to underestimate the frequencies among low-skilled workers, who often choose to leave the host countries when their health status is too bad. (Bollini & Siem)

Self-estimated health

Some studies have shown that immigrants are more inclined than the indigenous population to report their health status as bad. (Appelquist, Ekberg, Leiniö) This does not necessarily reflect actual differences. Obviously, self-estimated health may deviate considerably from what is clinically observable. Also, it has been contended that “illness” is a subjective feeling of not being well, as opposed to

clinical diagnoses, and this feeling is interpreted by the patient on the basis of personal experience and culturally inherited attitudes (Elliott & Gillie, Löfvander 1995, Sachs)

Routine health check-ups

General health check-ups (i.e. without any known or suspected disorder) have been suggested as a method for detecting the actual health situation in the population. No examples have been found.

Mental ill-health

One of the few aspects of ill-health among migrants to which some research effort has actually been devoted is mental health. Mental health differences among migrants as compared to nonmigrants have been observed for many years. Some studies have particularly focused stress from the immigrant or the emigrant point of view. One line of research focuses the mental health of refugees with particular emphasis on post-traumatic stress disorders, stemming from war, persecution and torture experiences. (Ekblad et al.) Another line of research focuses workers being relocated on professional grounds. (Anderzén; Munton & Forster;

Accidents

Another aspect of health in connection with migration that has received more than casual interest is accidents. The plain character and the immediate connection between cause and effect, as distinguished from disorders appearing after long exposure and latency, makes accidents more approachable and manageable for research. Further, certain accidents can be directly connected with work. It has been hypothesised that certain individuals or certain groups of people (e.g. cultural or ethnical groups) are more “prone” to accidents than others, but these assumptions have been refuted by later studies.

Previous studies of work-related accidents have been criticised for not paying sufficient attention to various types of work, age, skill, experience etc. (Aurelius & Moëll; Bruun; Döös, Laflamme & Bäckström). The fallacy of crude accident rates has also been demonstrated on empirical evidence showing concentrations of ethnic groups in riskier jobs and risks decreasing with more experience. (Lee & Wrench)

Certain other disorders

Certain major groups of disorders attract attention and statistics comparing migrants and nonmigrants may occasionally be found. Among these, for example *musculo-skeletal disorders* and *cancer* should be considered.

One cohort study of men who had once worked in Swedish PVC-processing

plants found higher frequencies of deaths from circulatory among Finnish immigrants than among Swedes. This excess, however, could be ascribed to higher rates of circulatory diseases in Finland in general. In both groups an increased incidence of malignant melanoma (Lundberg et al 1993).

Research needs

Relevant literature contains some – but few – direct proposals for future R&D ventures related to migration, working conditions and ill-health. Other needs for knowledge and information emerge indirectly from penetrating existing documentation. R&D needs could be divided into *methodology*, *types of ill health* and to different *categories of movers* and resident populations.

Basic questions

The primary questions from which numerous others can be derived are these: Are migrants affected in a different way compared with non-migrants, if exposed to the same kind of work environment? If so – in what way are they affected differently and what causes these differences?

From another angle, the question could be formulated: To what extent do migrants and non-migrants work under the same conditions?

Thus, an overriding task is to find out whether significant differences in frequencies between movers and non-movers are real or illusory. Of course, the potential differences can be measured in many ways – by some overall index of health and ill-health as well as frequencies of each particular diagnosis.

The first questions cannot be answered unless the extent of hidden cases is clarified, but this necessitates an exploration of the actual extent of illicit and informal work. Therefore, ventures seeking to do this should be prioritised.

Different health conditions in migrant and native populations have frequently been reported, described and analysed in various geographical and social settings. Working conditions have occasionally been suggested as at least partial explanations of these observations, but these suggestions are rarely, if ever, followed up. However, other circumstances have also been mentioned as important health determinants. For one thing, *circumstances outside work* need to be accounted for. It can be imagined that migrants and native inhabitants, generally speaking, do not share exactly the same living conditions or social conditions. Another aspect needing attention is the *culturally dependent views* affecting concepts of illness and pain as well as attitudes to reporting illness.

Before going into details two questions must be considered: What do we actually want or need to know? For what purposes do we need to know it?

In the long term, two main purposes can be distinguished as answers to the second question:

- If migration as such – directly or indirectly – induces increased risks, then preventive measures could be facilitated if the circumstances were clarified. (The specific migration approach)
- If the actual pathogenic circumstances behind certain disorders are unknown, then studies of migrants versus non-migrants might disclose indicators of these circumstances – and thus provide contributions to etiological knowledge. (The general epidemiological approach)

These approaches correspond to two different basic hypotheses:

- The migration process itself induces, directly or indirectly, some kind of pathogenic effect.
- Certain exposures (in working life) entail risks which may affect workers differently for some reason, e.g. genetic differences, conditions outside work or the duration of exposure – and therefore indirectly might produce different outcomes among migrants and the sedentary population in a certain place.

It should be borne in mind that these two hypotheses are not mutually exclusive. They could both be true – and they could both be wrong! Whichever has to be assessed in each particular case. From this point we can proceed to discuss what kind of knowledge is needed in response to the first question above.

Secondary questions

The basic questions evoke a vast number of secondary and tertiary question. Some of these refer to the epidemiological and etiological points at issue, while other have to do with the methods and techniques applied in order to gain knowledge.

Epidemiological questions

1. Are migrant workers apparently affected differently compared to native workers under the same or equivalent working conditions?
2. If so, how can such differences be explained?

The first question is logically followed by questions relating to data and methodology:

How can exposure be analysed in a way that separates the effects of working conditions from the influence exerted by components of the residential and external environments? This questions leads on to further methodological questions. (See below.)

The second question is followed by several hypotheses. Thus, observed differences might be explained by:

- actual differential susceptibility or vulnerability, due to genetic differences, previous exposure, pre-existing disorders or circumstances outside the work situation
- circumstances that are not work-related but related to different general living conditions
- selection effects from circumstances in the country of origin or from re- and on-migration
- statistical errors, due to the classification of work
- culture-dependent differential views of illness, resulting in differential self-estimations of health and sickness reporting

Methodological and technical questions

A question that must be asked is whether it is actually reasonable to search for general, or generalizable, knowledge about the effects of working conditions on migrants' health? Attempts to do so will be confounded by a plethora of problems including return migration and further migration, domestic mobility, living conditions, external/ambient environment (e.g. climate, traffic, pollution)

Then, how can a more differentiated picture of migrants and non-migrants be constructed in order to obtain a picture of causal factors or risk conditions without confounding components? (Taking into account reasons for moves, formal status and residential time in the host country, linguistic ability, cultural distance and professional competence, which might influence the risk.)

Obviously, available statistical data and other information are imperfect. As a basis for further research it should be explored to what extent official statistics can be broken down by citizenship, previous citizenship, place/country of origin and previous residence and related to health status how this information could be supplemented. Or, in other words: Is biographical information on residential and occupational mobility collected and used in contacts with health services? Could it be supplemented in other ways for epidemiological purposes?

Research issues

Methodological problems

Extensive mobility implies methodological problems for epidemiological and etiological research. Some essential methodological problems in migration studies are connected with the definition of observed and control populations, with data accessibility, validity and reliability as well as research ethics. (Hjern pp. 13, 44f)

One long-known major question concerns the “breeder” and “drift” hypotheses, i.e. whether observed health problems have originated *in situ* or been transported by an affected person moving to the place, bringing the disorder and thus adding a case to this place where it was not caused. (Malzberg & Lee). This question becomes more complex when dealing with long latency periods and highly mobile populations, implying exposure in many places, a problem which has been structured geographically in a doctoral thesis (Schærström 1996). The problem, however, is not confined to international migration but is basically the same with all kinds of mobility that entails exposure in several places, including commuting.

Comparisons related in literature on migration and health are often rough. Geographical and epidemiological studies often relate migrant groups from different countries to each other and to the resident population of the host country without accounting for different regions of origin in the home countries or for residential areas in the host country. Also, allowing for occupation and social conditions are rare. Thus, studies dealing with immigrants and work rarely pay the necessary attention to profession, industrial sector or branch, job experience etc. (Döös 1992, Aurelius & Moëll p. 6) Different pictures of accident rates and other work-related ill-health might result if such allowances were made. Certain results indicate that the difference in accident rates between immigrants and native workers tends to level out after 7 years of residence following immigration. (Aurelius & Moëll s. 5f, Döös et al. 1993) Further, it cannot be disregarded that the inclination – among managers and among workers themselves – to report accidents might be different and that such a difference might result in apparently different accident rates (Bruun p. 4)

Considering the special complex *migration, working conditions and health*, one has to tackle several methodological problems. One of these concerns classification of work-places and tasks. (Næss, p. 57) If it is hypothesised that immigrants are working under worse conditions than native workers it must be possible to classify the jobs unambiguously.

Another methodological problem that might become a considerable source of error is the difficulty to distinguish between actual immigrants and other workers. If information is available only on citizenship but not on country of origin it might be impossible to separate the two categories. (Döös 1993) Also, it can be questioned for how long it is reasonable to count people as migrants. If some genetically or otherwise congenital predisposition to certain disorders can be assumed then the migratory move can be considered relevant without any time limit. If, on the other hand, acclimatisation is believed to play a role, then the predisposition should eventually subside and the time factor becomes relevant. With the time factor follows that work experience and moves between work-places and occupation must be considered.

Thus, if research on work-related ill-health is to take age, work experience, training and previous environments and exposure into consideration (Döös 1993 p. 18), then access is required to data which might not be easily accessible.

As a consequence, in order to assess if risk differentials between movers and non-movers are real or just apparent, considerable statistical and methodological development is required. (Aurelius & Moëll p. 19; Döös 1992 p. 49)

The obvious question to follow – if it turns out that differences are real and statistically significant – is what causes such differences. Are they the result of some *selection* processes or can they be *related to situations and exposure* in the home country/town, to working conditions – or other conditions – in the host country or to the situation of being a migrant as such?

Selection processes

One fundamental question has to do with *selection processes* – which may be in operation before and after the actual migratory step. The effect was described well over a hundred years ago by Welton (1872) and has later been elaborated by Bentham (1988). Among movers in general and not least among those who move across international borders are workers with very different positions in working life. On one hand there is an elite moving to top positions or other attractive positions as experts or trainees in international organisations or companies. On the other hand are those who make a living from unqualified chores, often perhaps in the informal sector of the economy. It is hardly a daring assumption that there is a certain conjunction between the motives for moving and the work situation of the movers in their new locations. Those who move to qualified positions have made deliberate choices, while those who – for different reasons – have been forced to leave do not have the possibility to choose jobs that correspond with their formal competence. Probably also mobility varies between professions and trades just as between countries and regions. The reasons for moving may imply a selection which in turn implies different preconditions for health when the movers encounter their new working environments. In the host country other selection processes might appear which lead to concentrations of immigrants in certain places and jobs – and therefore, presumably, to certain exposures and eventually disorders.

Apparent, actual and hidden cases

Another fundamental question concerns the *actual frequencies of injuries and disorders* among movers and non-moving workers. The cases that are discovered, diagnosed and registered – the *apparent* cases – are a subset of all cases that actually occur. Research on work environment, like other R&D on working life, usually only studies conditions in the formal economic sector. Since in reality work appears in many other forms than for officially registered wages and

salaries such a view is too narrow. The informal sector is probably large and growing. It can be assumed that health risks are not lesser in the informal sector. Most likely there are large numbers of unrecorded cases. Therefore, it seems very urgent to widen the perspective of research on work environment and health beyond official statistics.

Types of ill-health

In the context of residential moves it has been pointed out that basic knowledge is deficient about major public health problems like arteriosclerosis and cancer and the life-style factors that are connected with these diseases. Also, knowledge about mental ill-health among immigrants is insufficient, although this is one of the health aspects that seems to be less neglected than others in migrant health research. Further, knowledge is inadequate about preventable accidents in the younger age groups “where the majority of recently arrived immigrants can be found” (Hjern p. 43)

One kind of *relocated health problems* that does not seem to have been observed until recent years is the post-traumatic stress disorders (PTSD). This complex is characterised by agony, chronic pain, disturbed sleep and sexual disturbances, arising from traumatic experiences (war, torture and other kinds of violence) which have been the direct motives for flight and migration. (Hjern pp. 10, 29ff; Sundquist 1994; Ekblad, Westin). The problem may appear as new for two reasons. For one thing the category of movers in question is perceived as new and, for another, professionals encountering these individuals are often unfamiliar with the type of disorders. Therefore, knowledge is required about recently arrived refugees’ medical, mental and social condition as a basis for more efficient integration in working life and adjusting working conditions to their capacities. It means that workplaces might have to be adjusted to immigrants’ different cultural, social and physical conditions, including health problems behind the migratory step, not least for refugees with physical and mental traces of traumatic experiences. (Ekblad, pers. comm.)

Another problem which *apparently has arisen in the host country* originates in the circumstances that workplaces in Sweden and the rest of the EU may not always be suited to non-European ethnical groups – to cultural, physiological and anatomical differences. Neither are resident workers generally prepared to encounter fellow workers and colleagues with post-traumatic stress syndromes. Some causes behind both the difficulties to find jobs and work-related health problems experienced by immigrants might be found in this complex. (Ekblad, pers. comm) More information is likely to be gathered from centres for medical treatment of refugees and rehabilitation centres for victims of torture (Hjern s 30)

Analyses are also needed about how people cope with vulnerability (Koser & Lutz, p.13) Many of today’s migrants are more vulnerable than earlier migrants,

e.g. since they are not included in social security systems, but also because of xenophobia.

Categories of movers

Movers can also be categorised according to *geographical or cultural origin* which can be the starting point for studies of their situation in the host countries. Intra-EU movers must, at least on formal grounds, be separated from external immigrants but can of course be subdivided as well along lines of nationality. Migrants from Central and Eastern Europe emerge as another important group. Further, although international migration usually attracts stronger attention, *domestic migration* should not be forgotten. For one thing domestic migrants also move from familiar to unfamiliar places and could be compared to international migrants. For another, secondary migration, i.e. migrants from abroad moving again within the host country, should be taken into account.

The *assessment of work injuries and potentially work-related disorders* in different member states is focused by another SALTSA project. How to assess injuries and disorders when workers have been exposed to health hazards in more than one country is one relevant motive for further exploration of this topic.

Several categories of movers can be pointed out, like asylum seekers and refugees, or simply work migrants. One group which attracts particular attention but is difficult to study is the illegal movers.

More knowledge is also needed about health problems connected with sending out or relocating staff. For future research about relocation, Munton & Forster have suggested longitudinal studies taking into consideration both work and non-work domains. They also maintain that a system-approach is needed which corresponds with the need for “circular process models”, illustrating the work-home interface and allows for how family adjustment and adjustment at work affect the adaptation of the family.

The same scholars maintain that work life researchers should make use of theories of family stress to understand how relocations affects whole families. The combination of a family-oriented but multi-disciplinary approach should aim at attacking theoretical as well as practical aspects of relocation and stress. (Munton & Forster p. 80)

A couple of other researchers have suggested a development of methods for selecting persons for foreign assignments. “To date, little is known about the cognitive dynamics that lead to correct versus incorrect attributional or evaluative processing in cross-cultural settings.” (Mendenhall & Oddou 1985, s 43)

Almost all previous studies of “relocation” are descriptive, a-systematic and retrospective. An ideal study should be based upon a representative sample and a longitudinal design with a prospective analysis. To obtain a better understanding

of the splitting effect of work-related moves one has to adopt a multi-factorial approach. (Luo & Cooper pp. 126-127)

Actions and remedies

Deficient knowledge about risks and safety rules might be a contributory causal factor behind work-related ill-health. Communication problems on the job and in health services have also been pointed out (Aurelius & Moëll p. 8; Hjern p. 9). Therefore, educational campaigns and improved introduction at workplaces have been requested (e.g. Döös 1990 p. 83; Döös 1992 p. 49). In this context more knowledge is needed about relations and cross-cultural communications at workplaces. (Döös 1992 p. 9) A practical effort to develop information packages about work environment has been requested. (Lundgren & Lyxell)

Some special problems and questions

From the theoretical view let us turn to the empirical. In real life various health problems can be observed throughout Europe which might be illuminated if a closer study of migration and other types of spatial mobility are taken into account. The following discussion is by no means meant to be exhaustive. Rather it should be seen as a rough agenda for research on mobility, work environment and health.

1. The general population and health status

Comparisons rendered in literature on migration and health are often rough. Thus, geographical and epidemiological studies often relate migrant groups from different countries to each other and to the indigenous population of the host country without accounting for different regions of origin in the home countries or for residential areas in the host country. Frequently in such studies, immigrants (in-migrants from foreign countries) are considered as broad statistical aggregates. In the latest Swedish report on public health, for example, it is stated that foreign-born inhabitants display higher frequencies of morbidity by any standard measurement. For example, higher proportions of people with impaired locomotive ability has been registered in certain groups of foreign-born inhabitants. No major study of mortality or causes of death among foreign-born inhabitants has ever been undertaken in the Nordic countries and the task poses methodological difficulties, due to re-migration. (Socialstyrelsen 1997, Ringbäck-Weitoft et al. 1998)

One occasional study indicates a higher rate of early retirement pension among workers of foreign origin than among native Swedes. (Edén et al) Whether this statistical image is correct and has a causal base in health problems is not clear. Much less has it been assessed whether the causes are “transported” or “acquired”.

A comprehensive comparison of the health status among immigrants vs. the indigenous populations (total or sample) in selected countries could serve as a back-cloth for other studies. Such a study could presumably be carried out as a database study.

2. *Certain exposures*

Those research ventures with an orientation towards migration that can be found are, above all, focusing unmistakable accidents, rather than work-related ill-health. Several studies point at differential accident risks between immigrants and native workers and usually – but not always – higher accident rates among the former. On closer inspection, though, doubts arise about the reliability of such investigations. For example, studies dealing with immigrants and work rarely pay the necessary attention to profession, particular tasks, industrial sector or branches, severity of accidents, job experience etc. There are also indications that the length of residence in the country plays a role. (Döös et al 1993, Aurelius & Moëll, Bruun, Næss) Also, allowing for living and other social conditions is rare.

Different pictures of accident rates and other work-related ill-health might result if such allowances were made. Certain results indicate that the difference in accident rates between immigrants and native workers tends to level out after 7 years of residence following immigration. (Aurelius & Moëll s. 5f, Döös 1993) Further, it cannot be disregarded that the inclination – among managers and among workers themselves – to report accidents might be different and that such a difference might result in apparently different accident rates (Bruun p. 4)

Thus, one main type of approach should focus workers (*classified by branches or professions*), in selected countries, accounting for immigrants and native-born persons. The selection of workers could be based on certain occupations or certain types of events (i.e. accidents and cases of disease). It could also start from branches that are known to employ large numbers of foreign-born workers. With a wider perspective – and provided that relevant data can be accessed – a *comparison with workers in corresponding activities in countries of origin* could be made.

This approach is a variation of the general theme where the potential pathogenic effects of a certain environmental factor are sought. Instead of the more common individual factory approach, the project could be designed to cover corresponding jobs in selected countries. With this design, the starting point would be persons who, because of their occupations or professions are exposed to certain factors or situations. In other words, the job factor would be kept “constant” and the effects of migration would be the sought.

Also, residential locations should, if possible, be taken into account, allowing for differential living conditions that might have synergistic or other effects on the workers’ health.

3. *Follow-up studies of emigrants and relocated*

A polarisation of mobility – a contrast between professional groups – has become evident, although migration and mobility has never been a socially uniform phenomenon. Highly educated movers, who used to be “invisible”, since they often moved temporarily and rarely caused any social problems, (Koser & Lutz p.7–8) now constitute a large portion of the internal EU movers as well as among the refugees from outside the union. At the same time many poorly educated people move to Europe from other continents. Several categories of movers can be pointed out, like asylum seekers and refugees, or simply work migrants. One group that attracts particular attention but is difficult to study is the illegal movers.

More knowledge is also needed about health problems connected with sending out or relocating staff. According to some researchers, almost all previous studies of “relocation” have been descriptive, a-systematic and retrospective, while an ideal study should be based upon a representative sample and a longitudinal design with a prospective analysis. (Luo & Cooper pp. 126–127)

A similar approach but concerning very different motives and other circumstances, could be applied to asylum-seekers and job-seekers. The study would focus people who have dispersed from a certain country. The population could be refugees or labour migrants, i.e. forced versus more or less voluntary migrants.

For one thing, it could be possible to follow Bosnian refugees in selected host countries. For another, labour migrants moving not from war and terror but from unemployment and *to employment*. Such groups can be found all over the EU.

One interesting case is provided by Volvo workers who moved from Sweden to Belgium a couple of years ago. This singular case might offer an opportunity to compare a group of industrial workers with a group of countrymen in “elite” positions of the EU administration, i.e. in the same host country. Similar studies could be carried out focusing the traditional group of migrants from Finland to Sweden in different occupations.

Yet another starting point could be the selection on the basis of actual competence, focussing professionals, working on temporary foreign assignments. (E.g. Swedes on highly qualified jobs in the EU, the UN or in development assistance). For example a project could focus the health status of groups like:

- Swedish (Volvo) employees as immigrants in Belgium
- Irish workers in Britain
- Greek autoworkers in Germany

These groups could be compared to compatriots in high-ranking positions abroad, for example Swedish, Irish and Greek EU servants, *and* to compatriots remaining in their home countries, working in similar occupations and to

indigenous fellow workers in each of the countries concerned. Ideally, groups of employees in corresponding positions and occupations who have been relocated within the same countries should be included.

4. Domestic relocations and occupational mobility

As pointed out above, mobility is more than international migration. This simple remark becomes important as it has been noted in some studies that immigrant workers often stay on a job for a longer time than native co-workers, a fact which to some extent might account for differential frequencies of disorders (Döös et al 1993; Paulson 1994)

This observation calls for an analysis of “occupational biographies”, longitudinal or time-geographical descriptions of individual life-paths, taking changes of occupations and exposures into consideration.

For future research about relocation, Munton & Forster have suggested longitudinal studies taking into consideration both work and non-work domains. They also maintain that a system-approach is needed which corresponds with the need for “circular process models”, illustrating the work-home interface and allows for how family adjustment and adjustment at work affect the adaptation of the family.

The same scholars maintain that work life researchers should make use of theories of family stress to understand how relocations affects whole families. The combination of a family-oriented but multi-disciplinary approach should aim at attacking theoretical as well as practical aspects of relocation and stress. (Munton & Forster p. 80)

A couple of other researchers have suggested a development of methods for selecting persons for foreign assignments. “To date, little is known about the cognitive dynamics that lead to correct versus incorrect attributional or evaluative processing in cross-cultural settings.” (Mendenhall & Oddou 1985, s 43)

5. Other types of mobility

Some of the new patterns pointed out by Knocke (above) are temporary moves and the people concerned constitute other categories of movers than migrants, possibly living in special landscapes of exposure – commuters, job-seekers, seasonal migrant workers, illicit migrants etc.

The increasingly evident flexibilisation of working life – which among other things implies teleworking, temporary employment and unconventional arrangements of work in both time and space – might bring about new patterns of mobility and travelling as well as more frequent changes of work and work environment. For example, the extent of commuting might decrease. European integration makes international commuting possible – i.e. regular journeys between home and work across intra-union borders.

6. Unemployed

With another approach, the starting point could be the sub-population, who, by definition, do not have any working environment, but whose health may be adversely affected, precisely for this same reason, namely those who have not gained access to the labour market. The integration problem as such has been described and analysed in various reports (e.g. Broomé et al, Schierup et al). The health aspect, though, has largely been overlooked.

In other words, unemployed and gainfully employed would be compared, accounting for immigrants and native-born persons. It should be taken into account that being out of work can be regarded as a kind of exposure along with other, more or less tangible components of the environment. The study could be made in one country or several countries. For each country in question (i.e. the EU/EEA countries and possibly some other countries, e.g. Canada and the United States), individual cases could be studied, according to the following concept.

Individual cases (= migrants) are to be documented and studied by interviews. The individuals in question are to be selected by unions in such a way that they represent both success and failure in terms of access to the labour market in a host country as well as the existence or non-existence of formalised integration programmes.

	Success	Failure
Integration programme exists:		
Integration programme does not exist:		

When selecting the cases, attention must be paid to background characteristics like age, gender, profession and experience.

Interviews should cover

- perceived health
- actual health (in terms of contacts with health services and diagnosed disorders)
- opinions concerning actions facilitating the labour market and working situation of immigrants.

The suggested approach is characterised as:

- an intervention study
- a co-operation between the three SALTSA committees and themes
- involving social partners
- a foundation for further research

It would be appropriate to develop the approach in close co-operation between SALTSA, TUTB and ETUI. (Ekblad, pers.comm.)

Conclusions

Reflections

The preparatory study has given rise to several reflections on the views underlying studies of migration and health as well as the need for relevant data and practical approaches in research projects.

Firstly, research on international mobility tends to be divided into immigration and emigration research. Although these approaches deal with what is basically two sides of the same phenomenon – expatriation – they tend to look at it from the same horizon: i.e. immigration to and emigration from one and the same country, whose majority population is perceived as the norm. For example, immigrants in Sweden as well as Swedish expatriates are compared with the Swedish majority population, whereas other comparisons might be just as relevant or even more so.

Secondly, mobility is a multi-faceted phenomenon. In demographic terms it may appear easy to classify each individual as a migrant or non-migrant. Although this is relevant in annual statistics recording recent events it is a superficial and potentially misleading classification in long-term epidemiological studies. Not only do migrants differ in terms of social, cultural, ethnical and professional background etc. They also differ in terms of residential periods in their “host countries”, i.e. the duration of residence makes a difference in terms of exposure but it also affects personal attitudes, experience and expectations as acclimatisation proceeds and thus also, presumably, the total risk. It must also be kept in mind that many migrants re-migrate or move on to other places and jobs in the “host country”, while simultaneously large groups of the host country’s population also relocate. This shuffle of people is a potential source of confounding as it obscures or complicates relevant comparisons. As a consequence, particularly when long latencies can be assumed, a broad view in time and space must be applied. Further, terms of nationality or citizenship may be a relevant if not completely satisfactory basis for classification in analyses of integration on the labour market and ethnical diversity on work-places. When environment-related health is focussed, such a classification appears much too coarse.

If it is acknowledged that the diversity of mobility affects the denominator function in the numerous different comparative calculations of risks on which hypotheses and explanations can be based, then this insight calls for different, varied and more sophisticated approaches.

Thirdly, epidemiological research generally tends to study work environment, private dwelling environment and outdoor environment and their potential health effects separately. There are very good reasons for trying to overcome this division. For one thing people move more or less regularly between them all, thus being exposed to a variety of environmental components. For another, in situations of migration or other relocation implying stress, family conditions may have either a moderating or complicating effect but they are never irrelevant. For these reasons, an integrated approach comprising both work and non-work domains appears adequate.

Fourthly, it easily follows from the preceding points that in-depth analyses of the relations between migration, work and health require information and data which are not easily accessible. Where data are unavailable the gap has to be filled by observations or questionnaires. This collection of data, in turn, has to be preceded by careful conceptualisation, including perfection of definitions and measurements. Efforts devoted to methodological development would be well spent.

Fifthly, it is obvious that accidents happen and other disorders evolve as concomitants of situations and exposure not only in regular occupations but also in unregistered work as well. Therefore, it is urgent to widen the perspective of research on work environment and health beyond official statistics. What needs to be done is no less than a qualified estimation of the amount of unofficial work and work-related disorders.

Suggestions and recommendations

Whereas the theme “migration, work and health” comprises an infinite variety of questions and approaches, it seems wise to concentrate SALTSA funds on projects of strategic importance. For one thing, the European perspective should be used to broaden the factual base and open opportunities for comparative studies. For another, it would be prudent to support projects having either a good potential for generating further studies by setting methodological examples and theoretical innovations or for influencing European legislation on health and work in a desirable direction.

Thus, a project design should seek to combine the main purpose of methodological development in combination with relevant empirical studies. The next task will be to design such a project. Preliminary outlines could be offered as a starting point for a workshop to be organised in a few months.

One problem that should not be forgotten but tends to fall between the responsibilities of the SALTSA committees is the health situation of migrants who have not been integrated on the labour market of their host countries.

Health can be regarded as a requirement for work and bad health, consequently, as an obstacle to work. Thus, health status must be considered in

connection with integration on the labour market alongside with language barriers and training, ethnicity, formal education and skills. Knowledge is required particularly about recently arrived refugees' medical, mental and social condition as a basis for more efficient integration in working life and adjusting working conditions to their capacities. This aspect should be considered by projects focussing integration and diversity.

Considering the character of SALTSA as a far-sighted, future-oriented programme as well as the largely unexplored, sprawling nature of the migration topic, certain strategic decisions must be made. It would be advisable to concentrate available resources, at least initially, on an organisational fundament and an explorative project, on which other more detailed and comparative studies can be founded.

In other words, a primary task would be to establish a network of researchers and other competent partners in order to draw up the strategy for future activities and to establish a theoretical and empirical base on which such activities can be conceived. Next, making use of the network, a roundup and review of relevant information should be made.

Before describing the recommended course of action in detail, it should be pointed out, that this approach does not – resources permitting – exclude other projects, for example case studies of particularly interesting migrant groups or work situations.

Research needs

Problems concerning the situation of movers on the labour market belong – in the SALTSA context – primarily to the responsibility of the programme committee for labour market and employment. Questions related to ethnic diversity and cultural encounters in working life are primarily treated by the committee for work organisation. Aspects belonging to the theme “work environment” are health and well-being and their potential relationship with the work environment of movers but also questions concerning potentially work-related ill-health and preconditions for systematic improvement of working conditions.

The assessment of work injuries and potentially work-related disorders in different member states is focused by another SALTSA project. How to assess injuries and disorders when workers have been exposed to health hazards in more than one country is one relevant motive for further exploration of this topic.

Objectives and tasks

Recommendable initial tasks would be

- methodological and theoretical development
- exploration of available data
- exploration of policies and activities
- drafting of projects

Methodological and theoretical development

The objective of this item is to facilitate and stimulate a more uniform and consistent collection, recording and reporting of information concerning migrant background of workers who are reported with potentially work-related ill-health. At least a certain degree of consensus on concepts, views and methods would pave the way for future comparative studies by developing a conceptual and methodological framework

Exploration of available data

The next important task is to enlarge the overview of literature and other sources of information (academic, official and 'grey' documentation) on migration and work-related health. The point of doing this would be to establish some baseline information about work-related health and migration. Possibly the overview of the findings could be published as a reference book.

The pilot searches carried out so far indicate that it would probably be more feasible to start at the macro level, developing a picture of different national groups in different countries. Thus, the exploration of data should be done nation-wise with the ambition to gather facts and identify knowledge gaps.

Exploration of policies and activities targeting the health of migrant workers

Further, a search should be made to gather information on conscious attempts to survey and treat the health conditions of migrants. This could be done on two main levels – a macro approach comparing the health status of selected national/ethnic groups in certain countries and a micro approach, studying activities on the work-place level.

Drafting of projects

Based on a solid investigation of literature, facts and activities, specific projects can be designed, focusing particular groups, types of work and health problems.

Project design

Methodology and approaches

Hypotheses and suggested explanations of observed patterns have been put forward by representatives of several disciplines. The topic is truly multi-disciplinary. In a purely scientific sense, several approaches and interests beside the medical one can be distinguished. In practical research these approaches tend to mingle and overlap.

- anthropological approach
- epidemiological approach

- geographical approach
- sociological approach

The *anthropological* approach emphasises the cultural aspect and the role that attitudes might play in the perception of ill health and health behaviour. For obvious reasons this aspect is quite relevant in studies of migrants and health.

A *geographical* approach would emphasise observable differences between places – the outcome of different environments and exposures before and after the migratory step. Thus, against the view that literature on migration and health tends to focus on “migrants *in place* as opposed to individuals moving from place *to place*”, a focus on “the dynamics of social and personal forces that shape health and illness in the shadow of immigration” has been proposed. (Elliott & Gillie p. 329). Also, a relevant question is if any significant geographical patterns of recognised work-related disorders can be discerned when residential patterns and environments of migrants and non-migrants are compared. Comparisons between immigrants and native workers should take into account places of residence (or residential environments) and the morbidity/mortality *there*, not just compare the immigrants with the total native population on nation-wide level. Further, from a geographical aspect it would be relevant to widen the perspective to mobility, rather than migration, thereby including commuting and temporary relocation.

Last but not least, the *sociological* approach would accentuate and provide the tools for analysing the social processes and contexts behind migration, health and work. One particular approach being suggested is the “entitlement approach”, favoured by Bollini & Siem (pp.820, 825) The proponents consider it useful analytical tool for exploring the relationship between health and migration. It is perceived to complement a traditional social class approach, analysing the loss and gain of “entitlements” or rights resulting from relocation.

Obviously, to be manageable the project has to be delimited considerably as compared to the complex described above and in previous memos. Potential approaches could aim at

- exploring certain types of work and health status among workers with different backgrounds,
- exploring the situation of certain (national, ethnic) groups, starting in their apparent health profile and relating it to their occupational profile

However, before taking the step to such detailed studies, it would be recommendable to go through a more strategic phase.

Selection of countries

In order to make the initial tentative project manageable, it is recommendable to

work with a selection of countries (approximately half a dozen), instead of the whole EU/EEA. Certainly, there may be good reasons for choosing any of these countries, but the total selection should cover

- big as well as small countries,
- countries with long experience as well as countries with short experience of immigration,
- “elite” as well as “proletarian” migration
- countries with major and minor domestic languages
- northern as well as southern Europe
- countries with different official immigration policies

Thus, these conditions would be met by the following potential selection, which is not to be seen as final:

Sweden: A country which has frequently displayed an ambitious immigration policy. The small language is an obstacle to many migrants.

United Kingdom: The country has long-standing experience of international mobility (both emigration and immigration). English language might be an advantage for many immigrants, knowing it before immigrating.

Germany: is the main host country in Europe today, receiving both German-speaking migrants and immigrants without any knowledge of the language

Italy: has comparatively low official numbers of foreign citizens but probably the largest number of illegal immigrants in the EU.

Ireland: a traditional emigration country turned immigration country in the wake of domestic economic boom and EU membership. Being predominantly English-speaking, the country may have a comparatively low linguistic barrier.

Belgium: As a centre for many European institutions, it is a destination for “elite” immigration (which is often temporary) and long-distance commuting, besides being host country to proletarian migrants.

Netherlands: The ambitious policy of integration and the small language make the country similar to Sweden, but the colonial past may have affected the migration pattern and fostered experience of cultural encounters.

France: Sharing a colonial past with several other European nations, having a large immigrant population, experiencing a hot debate on integration and diversity.

In addition, it will be a practical requirement for the study that competent and available researchers and other necessary contacts can be found.

Cautions

Last, a few words of caution appear to be appropriate. Migration is a controversial topic and potentially explosive. The combined topic of migration,

work and health is indeed no less controversial. Pointing out migrants or any other group as more prone to accidents and ill health – should this turn out to be the case – could have undesirable political, social and labour market effects. Therefore, project design and interpretation of findings must be carried out with utmost care.

References

Printed sources

Amin, Ash & Tomaney, John (1995) “*The Regional Dilemma in a Neo-Liberal Europe*”, *European Urban and Regional Studies* 1995 2 (2) 171–88.

Anderzén, Ingrid & Arnetz, Bengt (1997) “Psychophysiological reactions during the first year of a foreign assignment: results of a controlled longitudinal study”, *Work & Stress*, 1997. Vol. 11, No 4, 304–18

Anderzén, Ingrid & Arnetz, Bengt (1998?) *Psychophysiological reactions to international adjustment: results from a controlled, longitudinal study*. (Manuscript)

Anderzén, Ingrid & Arnetz, Bengt (1998?): *Subjective adjustment and attitudes towards foreign assignments among employees and spouses during their first six months abroad*. Manuscript.

Anderzén, Ingrid (1998) *The Internationalization of Work. Psychophysiological Predictors of Adjustment to Foreign Assignment*. Dissertation, Karolinska Institutet, Stockholm.

Anderzén, Ingrid, Arnetz, Bengt B., Söderström, Tommy & Söderman, Erik (1997) “Stress and Sensitization in Children: A Controlled Prospective Psychophysiological Study of Children Exposed to International Relocation”, *Journal of Psychosomatic Research*, Vol 43, No 3, pp. 259–69, 1997

Annandale, Ellen (1998) *The Sociology of Health and Medicine*. A Critical Introduction

Appelquist, Irja (1995) *Invandrarnas hälsa i ett svenskt landsortslän. En studie av människor i arbetsför ålder*. Karolinska institutet. Skaraborgsinstitutet. Rapport 37

Arbetsmarknadsdepartementet, ILO-kommittén: *Rapporteringen av ILOs konvention (nr 97) och rekommendation (nr 86) om migrerande arbetare respektive konvention (nr 143) och rekommendation (nr 151) om migrerande arbetstagare*.

Aurelius, Göran & Moëll, Hans (1977) *Hälsa, sjukdom och olycksfall hos invandrare. International symposium on safety and health of migrant workers*. Cavtat – Dubrovnik, 31 Oct.–4 Nov. 1977.

Bayard-Burfield, Louise (1999) *Migration and Mental Health*, (Doctoral dissertation) Lund University

Bentham, Graham (1988) ‘Migration and morbidity: implications for a geographical study of disease’, *Social science and medicine* 1988:26(1) 49–54

Bevelander, Carlson & Rojas (1997) *I krusbärslandets storstäder. Om invandrare i Stockholm, Göteborg och Malmö*. SNS Förlag

Black, J. Stewart; Mendenhall, Mark & Oddou, Gary (1991) "Toward a comprehensive model of international adjustment: an integration of multiple theoretical perspectives", *Academy of Management Review*, 1991, Vol. 16, No 2, 291–317

Bollini, Paola & Siem, Harald (1995) "No real progress towards equity: health of migrants and ethnic minorities on the eve of the year 2000", *Soc. Sci. Med.* Vol. 41, No 6, pp 819–28, 1995

Brochmann, Grete (1996) *European Integration and Immigration from Third Countries*. Scandinavian University Press.

Broomé, Bäcklund, Lundh och Ohlsson (1996) *Varför sitter "brassen" på bänken? eller Varför har invandrarna så svårt att få jobb?* SNS Förlag

Bruun, Ole (1986) *Arbejdsulykker – invandrere*. Direktoratet for arbejdstilsynet København

Campani, Giovanna & Carchedi, Franscesco (1997) *Alternatives à la migration: la rôle des partenaires sociaux*. Working Paper No WP/97/10/FR, European Foundation for the Improvement of Living and Working Conditions, Dublin

Dunford, Mick (1994) "Winners and Losers. The New Map of Economic Inequalities in the European Union", *European Urban and Regional Studies* 1994 1 (2), 95–114

Döös, M., Laflamme, L. och Backström, T. (1993) "Invandrare och arbetsolycksfall. En jämförande studie av olycksfall bland utländska och svenska medborgare", *Arbete och hälsa*, 1993:33, Arbetsmiljöinstitutet

Döös, Marianne (1990) *Invandrad i svensk arbetsmiljö. En intervjustudie med litteraturgenomgång*. Arbetsmiljöinstitutet, Undersökningsrapport 1990:25

Döös, Marianne (1992) "Invandrades arbetsmiljö – ett område för forskning", *Arbete Människa Miljö*, nr 1, 1992, s. 42–50

Edén, L., Ejlertsson, G., Lamberger, B., Leden, I., Nordbeck, B. & Sundgren, P. (1994) "Immigration and Socio-economy as Predictors of Early Retirement Pensions", *Scandinavian Journal of Social Medicine*, Vol. 22, No 3, 187–93.

Ekberg, Jan (1991) *Vad hände sedan? En studie av utrikes födda på arbetsmarknaden*. Acta Wexionensia. Serie 2 Economy & Politics 3.

Ekblad, S.; Janson, S. och Svensson, P-G. (1996) *Möten i vården. Transkulturellt perspektiv på hälso- och sjukvården*. Liber Utbildning.

Ekblad, Solvig (1996) "Större insatser krävs för att minska invandrades hälsorisker", *Svenska Dagbladet*, 29 april 1996

Ekblad, Solvig (1997) "Integrationsprogram bör ge sänkt arbetsgivaravgift." *Dagens Industri*, 8 mars 1997

Ekblad, Solvig (1998) 'Invandrades arbetsrelaterade ohälsa'. In *Det nya arbetslivets hälsoeffekter. Seminarium 16 januari 1998 i Stockholm*. Arbetslivsinstitutet.

Ekblad, Solvig et al (1997) *Posttraumatiskt stressyndrom bland patienter med invandrarbakgrund. En utveckling av ett pågående tvåårigt rehabiliteringsprojekt på Fittja psykiatriska öppenvårdsmottagning*. Institutet för psykosocial miljömedicin, IPM, Stockholm. Stressforskningsrapporter Nr 272.

Ekblad, Solvig; Belkic, Karen & Eriksson, Nils-Gustaf (1996) *Health and Disease Among Refugees and Immigrants. A Quantitative Review Approaching Meta-Analysis, Implications for Clinical Practice and Perspectives for Further Research. Part I: Mental Health Outcomes*. Stressforskningsrapporter Stress Research Reports Nr 267, IPM, Karolinska institutet, Stockholm 1996.

Elliott, Susan J. & Gillie, Joan (1998) "Moving experiences: a qualitative analysis of health an migration", *Health & Place*, Vol 4, No 4. pp 327–39. 1998

Esping, Hans (1995) *Dags för en ny migrationspolitik!*, SNS Förlag

European Foundation (1994): *European Conference on Migration and the Social Partners. Dublin, 9-10 December 1993*. Proceedings. European Foundation for the Improvement of Living and Working Conditions

Eurostat (1997) *Demographic statistics 1997. Theme population and social conditions*. European Communities, Eurostat.

Firnhaber, Rudi (1998) Shapiro & Basoglu. Om korta och långa behandlingar. *Kantt*, nr 1–2 1998.

Hjern, Anders (1995) *Migrationsmedicinsk forskning. En översikt*. MFR-rapport 1. Medicinska forskningsrådet

Höglund, Sten (1998) *Svensk forskning om diskriminering av invandrare i arbetslivet 1990–1996*. Kunskapsöversikt. Rådet för arbetslivsforskning.

ILO C143 *Migrant Workers (Supplementary Provisions) Convention 1975*

ILO C155 *Occupational Safety and Health Convention, 1981*

ILO C66 *Migration for Employment Convention, 1939 (Shelved)*

ILO C97 *Migration for Employment Convention (Revised) 1949*

ILO R100 *Protection of Migrant Workers (Underdeveloped Countries) Recommendation 1955*

ILO R151 *Migrant Workers Recommendation, 1975*

ILO R164 *Occupational Safety and Health Recommendation 1981*

ILO R86 *Migration for Employment Recommendation (Revised) 1949*

Johnson, Mark (1998) 'Migrant Minority Communities as Consumers and Producers of Welfare', *Migration and the Welfare State in Contemporary Europe. International Conference*, European University Institute May 1998

Jones, Huw (1990) *Population Geography*. Second ed. Paul Chapman

Kindlund, Hannelotte (1998) 'Förtidspensionering och sjukfrånvaro 1990 bland invandrare och svenskar'. In: Socialstyrelsen: *Invandrades hälsa och sociala förhållanden*. Pp. 133–51

Knocke, Woukko (1997) 'Migrations- och mobilitetsmönster från Öst till Väst: Har kvinnorna en roll i den nya rörligheten?' Bilaga 2 till SOU 1997:153 Arbetskraftens nya rörlighet – trygghet och jämställdhet..

Koser, Khalid & Lutz, Helma (eds) (1998) *The New Migration in Europe. Social Constructions and Social Realities*. MacMillan Press Ltd, St Martins Press Inc.

Leat, Mike (1998) *Human Resource Issues of the European Union*. Financial Times, Pitman Publishing.

Lee, Gloria & Wrench, John (1980): "Accident-prone immigrants": an assumption challenged', *Sociology*, Vol. 14, No 4, November 1980, pp 551–66.

Leiniö, Tarja-Liisa (1988) 'Invandrarnas hälsa', In: Socialstyrelsen: *Invandrades hälsa och sociala förhållanden*. Pp.73-118.

Lundberg, Ingvar; Gustavsson, Annika; Holmberg, Bo; Molina, Gustavo & Westerholm, Peter (1993) 'Mortality and Cancer Incidence Among PVC-Processing Workers in Sweden', *American Journal of Industrial Medicine* 23:313–19

Lundgren, L., Lyxell, A. (1997) *Projekt småföretagare med invandrarbakgrund. Information om arbetsmiljö*. Yrkesinspektionen Örebro distrikt, Rapport YI ÖR 042, April 1997.

Lundh, Christer & Ohlsson, Rolf (1994) *Från arbetskraftsimport till flyktinginvandring*. SNS Förlag

Luo, Lu & Cooper, Cary L. (1990): "Stress of job relocation: progress and prospect", *Work & Stress*, 1990, Vol. 4, No 2, 121–8.

Löfvander, Monica (1995) 'Kulturbundna syndrom och höga sjuktal. Finns det ett samband?' *Socialmedicinsk tidskrift*. 1995:9, pp 407–11.

Löfvander, Monica (1997) *Illness, disease, sickness. Clinical factors, concepts of pain and sick leave patterns among immigrants in primary health care. Effects of different therapeutic approaches*. (Dissertation) Karolinska institutet.

Malzberg, Benjamin & Lee, Everett S. (1956) *Migration and mental disease. A Study of First Admissions to Hospitals for Mental Disease*. New York, 1939-1941. New York. Social Science Research Council

Marie, Claude-Valentin (1995): The EC member states and immigration in 1993. Synthesis Report 1993: Closed borders, stringent attitudes. RIMET. European Commission, DG V.

- Marie, Jean-Claude (1993) *The EC Member States and Immigration in 1993. Closed borders, stringent attitudes*. European Commission. Directorate General V Working Document
- Marks, Lara & Worboys, Michael (1997) *Migrants, Minorities and Health. Historical and contemporary studies*. Studies in the social history of medicine. Routledge
- Marsella, Anthony, J. (1997) "Migration, ethnocultural diversity and future worklife: challenges and opportunities", *Scandinavian Journal of Work, Environment and Health* 1997:23 suppl. 4:28-46
- Mendenhall, Mark & Oddou, Gary (1985 "The Dimensions of Expatriate Acculturation: A Review", *Academy of Management Review*, 1985 Vol. 10, No. 1, 39-47
- Montagnani, Roberto (1999) Migrant workers in the shipyard sector: health and safety issues. Unpublished paper. ????
- Munton, Anthony G. & Forster, Nick (1990) "Job relocation: stress and the role of the family", *Work & Stress*, 1990, vol. 4, No 1, 75-81.
- Mårdh, Per-Anders (red) (1998): *Rese- och migrationsmedicin*. Studentlitteratur.
- Næss, Ragnar (1985) *Innvandrere på norske arbeidsplasser: en studie av tyrkiske og pakistanske innvandreres situasjon på et utvalg arbeidsplasser*. Arbeidsforskningsinstituttet AFI, Oslo.
- Palagiano, Cosimo (1991 ?) 'The current health problems of Italy as an immigration country', *Revue Belge de géographie*. 114e année 1990 ???
- Paulson, Sven (1994) *Sjukfrånvaro och arbetsmiljö*, I Schierup och Paulson: *Arbetets etniska delning*. sid. 169–80.
- Pickup, Laurie (1990) *Mobility and Social Cohesion in the European Community – A Forward Look*. European Foundation for the Improvement of Living and Working Conditions.
- Ramseier, E.W. & Molinaro, R. (1994) 'Durch Unfall bedingte Arbeitsausfälle von Migranten', In: *Migrationsmedizin: Praxis und Forschung in der Schweiz. Symposium der schweizerischen Akademie der Medizinischen Wissenschaften. 27/28. Oktober in Interlaken*.
- RFV (1990) *Den med sjukpenning ersatta frånvaron år 1988 efter medborgarskap*. Riksförsäkringsverket informerar. Statistisk rapport Is-R 1990:4. Riksförsäkringsverket
- RFV (1996) *Invandrarna i socialförsäkringen. Sjukskrivning, rehabilitering och förtidspensionering under 1990-talet*. Riksförsäkringsverket redovisar. 1996:11.
- Riksförsäkringsverket (1990): *Den med sjukpenning ersatta frånvaron år 1988 efter medborgarskap*. Statistisk rapport Is-R 1990:4. RFV informerar.
- Riksförsäkringsverket (1996) *Invandrarna i socialförsäkringen. Sjukskrivning, rehabilitering och förtidspensionering under 1990-talet*. RFV redovisar 1996:11.

Ringbäck-Weitoft, Gunilla; Gullberg, Anders & Rosén, Måns (1998) "Ingen överdödlig-
het för personer födda utanför Norden", *Läkartidningen* volym 95, nr 12.

Rådet för arbetslivsforskning (1995) *Invandrarna på arbetsmarknaden – etnisk diskrimi-
nering eller kreativa kulturmöten? Rapport från ett seminarium anordnat den 10 maj
1995*. Rådet för arbetslivsforskning

Sachs, Lisbeth (1987) *Medicinsk antropologi*. Almqvist & Wiksell

SALTSA: *Migration/Mobility, Work Environment and Health – a preliminary study*.
Memo 1998-12-30 Arbetslivsinstitutet [The National Institute for Working Life] Stock-
holm

SALTSA: *Migration/Mobility, Work Environment and Health – some research outlines*,
Memo 1999-03-13, Arbetslivsinstitutet [The National Institute for Working Life] Stock-
holm

SALTSA: *Migration, Working Conditions and Health – a proposal*. Memo 1998-08-26
Arbetslivsinstitutet [The National Institute for Working Life] Stockholm

Schærström, Anders (1996) *Pathogenic paths? A time geographic approach in medical
geography*. Avhandling. Lund.

Schierup, Carl-Ulrik & Paulson, Sven (red) (1994) *Arbetets etniska delning*. Carlssons.

Schierup, Carl-Ulrik; Paulson, Sven & Ålund, Aleksandra (1994) 'Den interna arbets-
marknaden. Etniska skiktningar och dequalificering', I Schierup och Paulson: *Arbetets
etniska delning*. sid. 25–80.

SFR (1994) *Forskning om internationell migration och etniska relationer med stöd från
Socialvetenskapliga forskningsrådet*. 1990/91 – 1994/95 SFR

Socialstyrelsen (1997) *Folkhälsorapport 1997*. SoS-rapport 1997:18

Socialstyrelsen (1998) *Invandrars hälsa och sociala förhållanden*. Underlag till
Folkhälsorapport 1994 och Social rapport 1994. Socialstyrelsen, Epidemiologiskt
Centrum och Folkhälsoinstitutet.

Sundquist, Jan (1994) *Migration and health. Epidemiological studies in Swedish
primary health care*. Department of Community Health Sciences, Lund University

Sundquist, Jan (1998) "Immigrationsmedicin", I: Mårdh (red) *Rese- och migrations-
medicin*, ss 227–40.

SvD (1998-09-04) "Flyktingars hälsa. Hjälp behöver sättas in tidigare". *Svenska Dag-
bladet*.

Welton, T.A. (1872): 'On the effects of migrations in disturbing local rates of mortality,
as exemplified in the statistics of London and the surrounding country, for the years
1851–1860', *Journal of the Institute of Actuaries*, 16, 153 1872

WHO (1996) Equity in Occupational Health. Report on a WHO meeting, Birmingham, United Kingdom 17-19 October 1994. WHO Regional Office of Europe, Copenhagen.

WHO *Health 21 – The Health for All Policy for the WHO European Region – 21 Targets for the 21st Century*.

Wood, William B., 1995) *Ecomigration – linkages between environmental change and migration*. Draft (Revised 11/27/95) Office of The Geographer and Global Issues, US Department of State.

Wrench, John (1994) *Hazardous Work: Ethnicity, Gender and Resistance*. Unpublished paper, presented at the XIII World Congress of Sociology, Bielefeld, July 1994.

Wrench, John (1997) *European Compendium of Good Practice for the Prevention of Racism at the Workplace*. European Foundation for the Improvement of Living and Working Conditions, Dublin

Wrench, John (1997) *European Compendium of Good Practice for the Prevention of Racism at the Workplace*. European Foundation for the Improvement of Living and Working Conditions, Dublin

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Phili Muus, ERCOMER

Charles Westin, CEIFO Stockholm University

Internet sources

Association of European Migration Institutions, The. Minutes of the ordinary General Assembly of AEMI held at the Jagiellonian University, Polonia Institut,, Krakow, Saturday September 28, 1996. <http://users.cybercity.dk/~ccc13652/news/minutes.htm>

Association of European Migration Institutions, The. Statutes of AEMI. <http://users.cybercity.dk/~ccc13652/news/minutes.htm>

CEIFO Centre for Research in International Migration and Ethnic Relations, Stockholms universitet. <http://www.ceifo.su.se>

DAMES: The Danish Centre for Ethnicity and Migration Research. Hemsida. <http://www.suc.dk/afd/dames.htm>

ERCOMER (The European Documentation Centre and Observatory on Migration and Ethnic Relations) <http://www.ercomer.org>

Malmö högskola <http://www.mah.se>

Appendix 1.

Project design – some outlines

Next, some principles for research designs will be suggested on purely theoretical grounds, followed by a discussion of their potential advantages along with some observed particular issues that call for better understanding and research activities. A visual presentation of the outlines of discussion is made in figure 1.

How to interpret the figure

The horizontal plane shall be thought of as a simplified representation of space. It is slightly tilted to indicate two dimensions. On this plane three round surfaces are marked, symbolising three countries. Time is depicted on the vertical axis. A period of observation is indicated as the $t_1 - t_2$ interval. During any period certain demographic events and processes take place – births, deaths and spatial moves. In a time-space view these processes can be thought of as *population flows*.

Some such typical population flows are represented by trajectories. Straight vertical trajectories represent persons basically remaining in the same location¹ for a certain time period, while the horizontal parts of the trajectories indicate residential moves. It is taken into consideration and indicated in the figure that residential moves take place within countries as well as between them. A_1 , B_1 and C_1 represent the stationary sub-populations, being resident in the same country from birth onwards. A_2 , B_2 and C_2 represent sub-populations having moved within each country.

“Country A” represents countries which are mainly emigration countries and receive few immigrants. In reality, this type can be exemplified by most countries in Eastern Europe and some Mediterranean countries outside the EU.

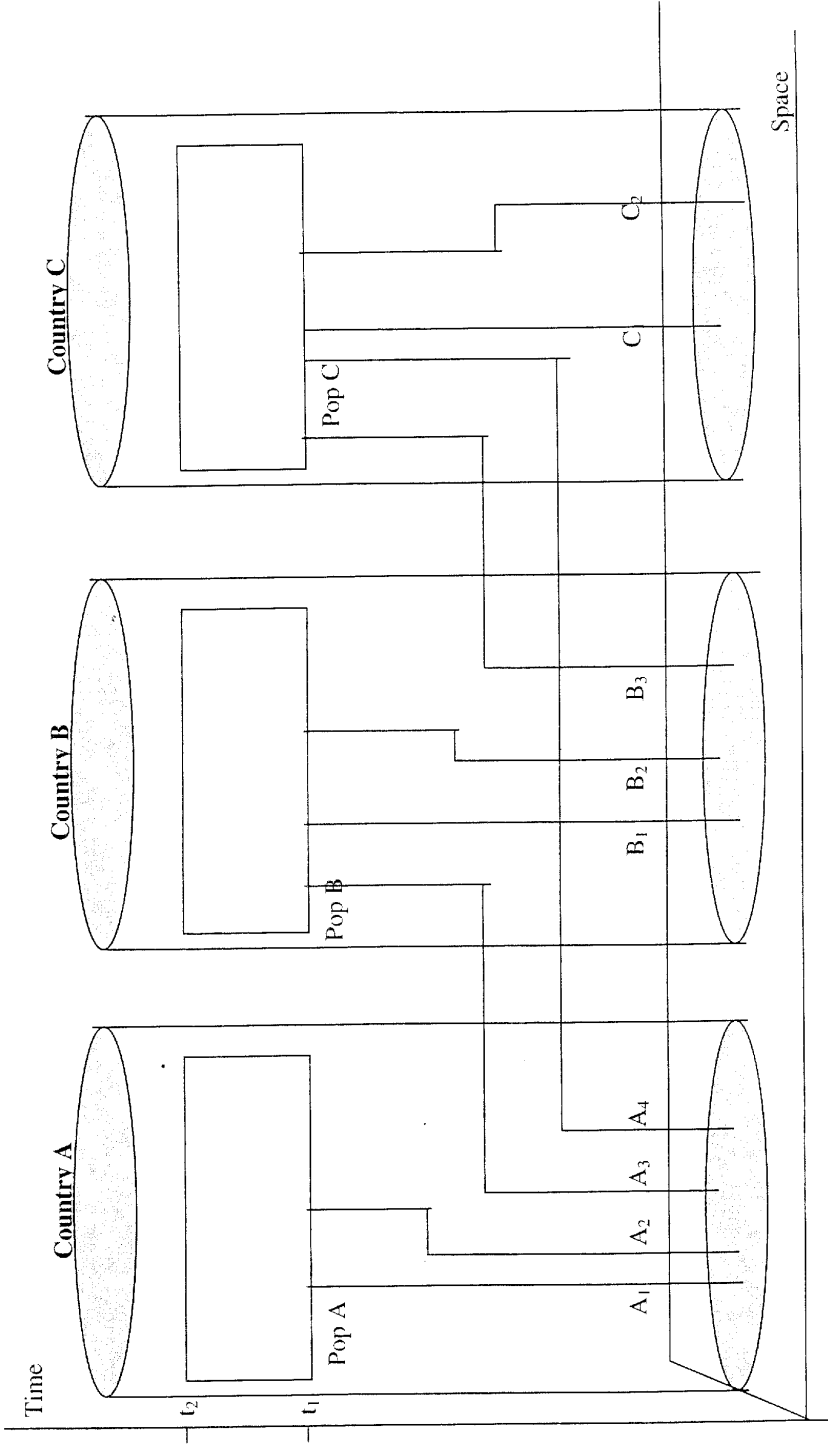
“Country B” represent countries which receive a substantial inflow of migrants but from which a considerable number of people also emigrate, like Sweden.

“Country C” represent countries of a similar type, but which mainly receive a considerable net inflow of migrants.

Before moving on, it should be pointed out that any type of area, not just countries, could serve as unit for comparison.

1. The exact definition of the same location depends on the spatial resolution, which is applied or deemed relevant in the particular case.

Figure 1: Basic mobility flows. Anders Schærström/1999-02-11



The resident population in each of the countries during the period of observation is represented by blocks (Pop. A-C). Considering the migratory moves that have taken place before the observation period, the populations are composed as follows:

- Population A: $A_1 + A_2$, i.e. only indigenous inhabitants.
- Population B: $B_1 + B_2 + A_3$, i.e. a mix of native inhabitants and migrants from one other country.
- Population C: $C_1 + C_2 + A_4 + B_3$, i.e. a mix of native inhabitants and two distinct groups of migrant inhabitants.

Potential comparisons

The dependent variable in focus for every study is to be health (or ill-health), which, of course, can be defined in a multitude of ways, primarily using recognised diagnoses but also various identifiable symptoms and signs. If we want to analyse the potential effects of migration on the actual or apparent pattern of health, there are basically three main dimensions which can be used as starting points for comparisons.

- Health status
- Exposure
- Migrational status

1. One general epidemiological approach sets out from the presence or absence of certain disorders, symptoms, signs or other health characteristics – in a territorially defined population. This is the approach applied in broad epidemiological, sociological and geographical surveys of the public health in a country, a county or any other territory. Within the population various sub-groups can be distinguished. Naturally, any background variable can be used for subdivision of the observed population, e.g. age, gender, educational level or professional experience. Several studies have been made, focusing different groups of migrants, usually on an international level, but few explicitly consider the working situation.

2. The starting point of another general epidemiological approach is whether individuals belonging to a certain population are or have been exposed or not to certain factors – for example components, operations or situations in working life (= the work environment), at home or in the external environment. A group that has obviously been exposed can be compared with a reference population – the total population or a control group.

If, thus, a certain exposure is known and its potential outcomes are sought, exposed persons are compared with non-exposed. If, as a secondary stage, the question is raised whether individuals with different ethnical or geographical

origins are affected differently, comparisons between groups can be made in the following way:

$$B_1 \text{ vs } B_2 \text{ vs } A_3 \text{ and } C_1 \text{ vs } C_2 \text{ vs } A_4 \text{ vs } B_3, \text{ respectively.} \quad (1)$$

i.e. between the indigenous population and one or two categories of immigrants. In the first type of comparison one group of immigrants is set against the indigenous population, while in the latter two categories of immigrants with different countries of origin will be set against the host country's native population.

This approach is sometimes used in studies of work-related health and certain occupational exposures. For example, in one study of PVC-processing workers, the observed population was sub-divided into Swedes and immigrants (the majority of whom were from Finland) who were compared with respect to cancer incidence and mortality (Lundberg et al).

3. Using a third approach, the starting point for descriptions and analyses can be certain *groups of people*, defined by their residential biographies as migrants or stationary (non-migrants). With this different approach, the people categorised as migrants and non-migrants could be the starting point and the sought variables would be certain *situations or environments*, (e.g. their occupations, industries, branches, or indeed places of residence their work situations) and their *health status*. Have they been exposed or not? Are certain disorders, symptoms or signs present or not – and to what extent in different groups?

The general approach allows several variations.

I. Starting from a certain type of ill-health and seeking its causes and circumstances, according to the model above, the following main comparisons can be made:

$$A_1 \text{ vs } A_2 \text{ vs } A_3 \text{ vs } A_4 \text{ and } B_1 \text{ vs } B_2 \text{ vs } B^3 \quad (2)$$

i.e. *persons with the same country of origin are compared*. In the first case one could think of refugees or other emergency migrants seeking a new living in a foreign country. In the other case the migrants might be a kind of “elite” moving to highly qualified positions. The outcome of this type of comparison would show how migrants have fared as compared to the indigenous, stationary population in the home country. More specifically, the comparisons would show to what extent certain disorders, signs and symptoms are present in persons of the same ethnical or geographical origin, living in different environments – or to what extent they are exposed differently to certain known or assumed pathogenic factors and circumstances.

This approach seems to be less common than the ones described above.

Another variety of the approach would be

$$A_3 \text{ vs } B_1 \ \& \ B_2 \text{ vs } A_1 \ \& \ A_2 \quad (3)$$

That is: an immigrant group (A_3) is compared with native inhabitants (B_1, B_2) and their countrymen (A_1, A_2) remaining in the home country.

A third variety would focus

$$A_4 \text{ and } B_3 \quad (4)$$

That is: *migrants from different home countries are compared with each other in the same host country.*

Advantages

The point of using this approach would be the potential of comparing certain migrant groups not only with the majority population in a host country but with their compatriots remaining in their home countries.

The prospects of this approach depend upon the accessibility of data or the possibilities to carry out field studies in both the host country and the country/countries of origin.

If applied consistently, the approach might reveal selection processes that account for the apparent prevalence or incidence of disorders.

Appendix 2.

Selected institutions and organisations

Sweden

- *ALI – Norrköping*. At the newly established affiliate of the National Institute for Working Life in Norrköping migration will become a theme of priority. Current plans, however, do not cover research on work environment and health but the organisers invite discussions on the topic.
- *CEIFO*² is a multi-disciplinary research centre, established in 1983 at Stockholm University. Its research activities cover international migration, ethnicity, nationalism, xenophobia and racism, ethnical relations, immigration policy and models for the reception of refugees. Also, living conditions and integration of immigrant groups is studied in international comparison. The research activities are organised in ten programmes. There is no research on health and working conditions. The centre publishes its own report series and is responsible for a section in *Scandinavian Migration and Ethnic Minority Review*. (Sources: Charles Westin, pers. comm. CEIFO web-site)
- At the *IPM*³ (Institutet för Psykosocial Miljömedicin) research is carried out on migration and unemployment as well as psychosocial consequences thereof with the ambition to develop proposals for practical solutions. (Ekblad, pers. comm.)
- The *university college in Malmö* pursues higher education on the topic International Migration and Ethnic Relations (IMER), focussing the reasons for residential moves and the consequences in terms of integration, cultural encounters, cultural understanding and cultural conflicts. (Source: the web-site of Malmö högskola) It has not been possible to establish a personal contact with anyone responsible for the theme. Available information, however, does not indicate any concern with health and work.

Others

- The *ETUI*⁴ plays an expert role in one project connected with migration. This project deals with “crossborder employment in the EU”. The project is a co-

2. Centre for Research in International Migration and Ethnic Relations

3. National Institute for Psychosocial Factors and Health

4. European Trade Union Institute

operative venture between the department for social law at Ghent University, the department for work science at Lille University and a Belgian organisation for small and medium-sized enterprises. The study comprises mobility across the Franco-Belgian and Belgian-Dutch borders. At a later stage the study is to be widened to include mobility across the border between the Netherlands and Germany. The objectives of the project, which are not exclusively scientific, are three-tiered. On the first level information is gathered on labour law, social security and taxation in connection with cross-border work. Next level implies a scientific processing of the gathered information and finally the participating organisation transfer the results to concerned social partners and authorities. There does not seem to be any ambition to study health conditions. So far, nothing has so far been published. (Source: Stefan Clauwaert, ETUI. Pers.comm.)

- *ERCOMER*⁵ is an affiliate of Utrecht university. The objective of the Centre is to promote academic research and higher education. It is expected to be a centre for publishing and communication. A series of books and a newsletter – *Merger*. Are published by the Centre. Via the ERCOMER web-site the WWW *Virtual Library of Migration and Ethnic Relations* can be reached. Searching this library for the concept “health” resulted in links to 11 other institutions. Of the almost 30 projects currently going on at ERCOMER only one has any evident relevance to health concerns, namely a study of tuberculosis among refugees and asylum seekers (Source: the web-site)
- *The European Foundation for the Improvement of Living and Working Conditions* has published two reports concerned with migration, none of which is directly concerned with health and work. (Wrench, Campani & Cardechi)
- As the name indicates, the *Association of European Migration Institutions* is a European association of institutions concerned with migration research. Some twenty institutions belong to the AEMI. According to its statutes, the association is open to institutions and organisations working with documentation, research and presentation of present and historical European migration. The AEMI has the ambition to be a forum for dissemination of knowledge and initiating research projects. The statutes do not specify any foci of the migration studies. No contact with the associations or the institutes belonging to it has so far been taken.

5. The European Research Centre on Migration and Ethnic Relations

- *DAMES*, The Danish Centre for Ethnicity and Migration Research, in Esbjerg, has been in operation since 1994. The Centre was established to cover topics between the fields between those of the Centre for Peace and Conflict Research in Copenhagen and the legally oriented Danish Centre for Human Rights. Above all, the research focuses integration problems in Danish society. *DAMES* also works as Nordic editorial office for the international scientific journal *Migration – A European Journal of International Migration and Ethnic Relations*. (Source: *DAMES* web-site)