

Migration and public health

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ANDERS HJERN

Centre for Health Equity Studies, Karolinska Institutet/Stockholm University, Stockholm, Sweden

Summary

In an increasingly globalized world more people have the possibility to settle in a country other than the one in which they were born. To the new country migrants bring their lifestyle and other important risk factors and protective factors for health. If the immigrants are refugees, a period of uncertainty awaits them before their life in a new country can begin. As newcomers to Swedish society, they often end up in low-status neighborhoods, are reduced to heavy and low-wage jobs and often also continue to be socially vulnerable as a result of discrimination.

Immigrants in Sweden of non-European background report three to four times as often as Swedish-born people that they suffer from poor or very poor health. Male immigrants smoke more than Swedish-born men, while alcohol-related diseases are less common among many immigrant groups. The incidence of a number of specific public health problems, such as allergic diseases and diabetes, varies widely across different immigrant groups. The particular background of refugees makes them especially susceptible to psychiatric morbidity, a susceptibility that is further increased by the stresses that occur during the asylum process. Adult undocumented migrants and asylum seekers have limited access to health and medical care in Sweden.

Introduction

Almost one and a half million Swedes, or about 20 per cent of the Swedish population, emigrated between 1850 and 1930, mainly to North America. Immigrants to Sweden in the same period were also predominantly returnees from America.

The 1930s and 1940s saw a reversal of this trend and a subsequent gradual rise in the proportion of foreign-born people in the Swedish population (Figure 1). In the 1940s, those who made their way to Sweden were mainly refugees from World War II. Strong demand for labour in the Swedish manufacturing industry in the 1950s and 1960s initially attracted immigrants from our neighbouring Nordic countries, and subsequently also from Southern Europe and Turkey. This wave of labour immigration peaked in the final years of the 1960s. Demand for labour within Swedish industry fell drastically at the beginning of the 1970s and immigration has been dominated by refugees and their relatives ever since [1].

In the 1970s and 1980s, many refugees from Latin American dictatorships and the Islamic revolution in Iran settled in Sweden. In the 1990s and the first years of the 2000s, refugees came mainly from the disintegrating former communist countries of Yugoslavia and the Soviet Union, and from civil war-torn Iraq and Somalia.

On 31 December 2009, 19 per cent of the Swedish population were of foreign origin, i.e. were either born in a country other than Sweden (14 per cent) or had two foreign-born parents (5 per cent). Of these, 52,000 were international adoptees. This figure does not include asylum seekers and other migrants without a residence permit, who do not appear in the population statistics.

The majority of immigrants to Sweden in the post-war period have been children or young adults in the 25–35 age group. After 1975, however, refugee immigration has resulted in a higher proportion of immigrants in the 40–60 age group. Although the percentage of elderly people among immigrants has always been low, the percentage of foreign-born

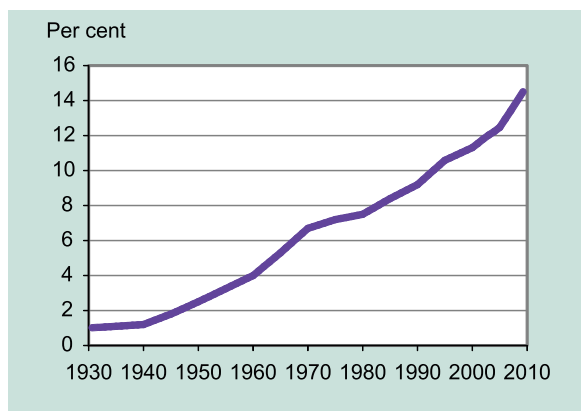


Figure 1. Foreign-born people.
Percentage of foreign-born people in the Swedish population, 1930–2010.

Source: Statistics Sweden.

people among the elderly in the Swedish population is rising. The increase in elderly immigrants is likely to continue at a fairly rapid pace in the next few decades, the outcome of the immigration of young adults from the 1960s onwards. Gender distribution among immigrants has been fairly uniform over the years. Women are somewhat over-represented in the 20–35 age group, mainly because more foreign-born women than men move to Sweden in order to marry native-born Swedes [1].

A growing number of people are settling, for longer or shorter periods, in countries other than the ones in which they were born. Migration is part of a global development process linking peoples and nations of the world ever more closely through increased trade and improved communications [2]. This development affects public health in Sweden in many different ways. The present section deals only with the public health of those who have migrated to Sweden from other countries and that of their children. Health risks which Swedes are exposed to when travelling abroad – infectious diseases, for example – are not dealt with in the present chapter but in Chapter 15 on infectious diseases. Nor does this chapter deal with the health situation of national minorities who have long been represented in the Swedish population and who enjoy special rights under Swedish law: the Sami, the Swedish Finns, the Tornedalers¹, the Roma and Jews.

Health among foreign-born Swedes

In the 2000–2005 Surveys of Living Conditions (ULF), Statistics Sweden asked a representative selection of the Swedish population about their health. People with foreign backgrounds uniformly

reported having poorer health than those with Swedish backgrounds [3]. Interviewees born outside of Europe reported having the worst health, followed by those born outside EU15 countries. The health patterns of people born in EU15 countries were more similar to those of native-born Swedes.

These disparities emerged in the responses to almost all health-related questions. They were particularly pronounced in relation to subjective health, diminished work capacity and physical disabilities, but were also evident in form of symptoms of anxiety and nervousness. It was three to four times more common for foreign-born interviewees with origins outside Western countries to assess their health as poor or very poor compared with interviewees with Swedish backgrounds (Figure 2). When the analysis was corrected for social differences across groups – such as how common it was for interviewees to be labourers, to have poorer economic resources and to live in rented accommodation – the health disparities decreased significantly [3]. This indicates that social living conditions in Sweden are largely responsible for the ill-health reported by people of foreign background. Other important causes of a poorer state of health include, for example, risk factors associated with being a refugee and a newcomer in Swedish society. It takes at least ten years for an immigrant or a refugee to enjoy living conditions equivalent to those of the rest of Sweden's population [4]. It is probable that perception of being discriminated against also contributes to poorer health [5].

In common with Swedish-born women, foreign-born women report more instances of ill health than men of the same background. The 1996–1997 Immigrant Study conducted by the Swedish National Board of Health and Welfare showed that the health of women born in Turkey and Chile differed more from that of Swedish-born women than the health of men in the corresponding groups [3]. The 2000–2005 ULF surveys, however, found that the health disparities between Swedish-born and foreign-born people applied equally to women and men. This suggests that results cannot be generalised across all immigrant groups [3]. Mortality risk figures present a different picture. Men and women of non-European origin tend to have a lower risk of early death than Swedish-born people (Figure 3).

When analysing foreign-born mortality in the nationally registered Swedish population, it is important to bear in mind that deaths occurring outside Sweden are not always reported to the Swedish authorities. This applies particularly where deaths occur outside Europe. This under-reporting results in systematic underestimation of the actual number of deaths.

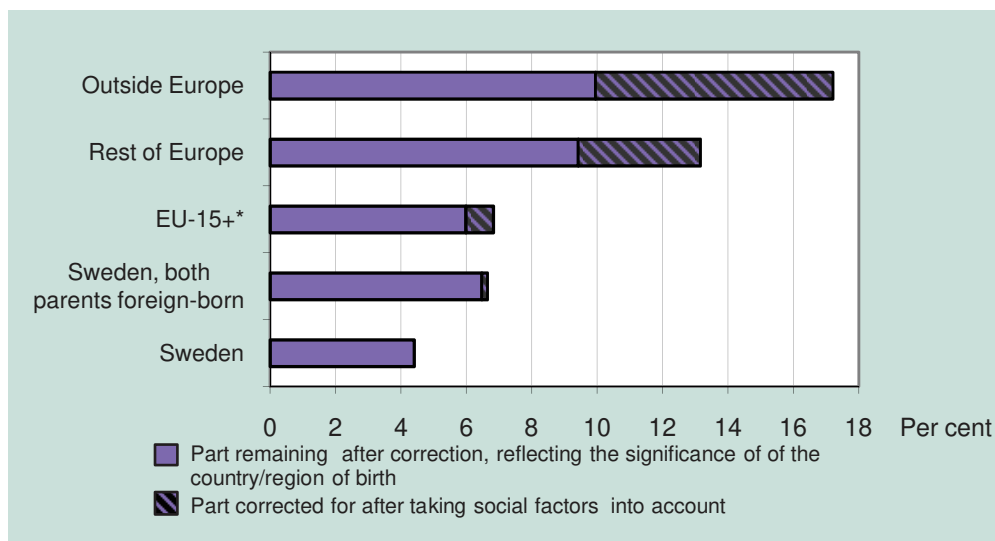


Figure 2. Health by country of birth.

Percentage of each group reporting poor or very poor health, by region/country of birth, 2000–2005.

Predicted percentage based on logistic regression analysis adjusted for social factors (socioeconomic group, type of housing and cash margin).

*Also includes North America, Australia and New Zealand.

Source: Survey of Living Conditions (ULF) 2000–2005, Statistics Sweden and Swedish National Board of Health and Welfare [3].

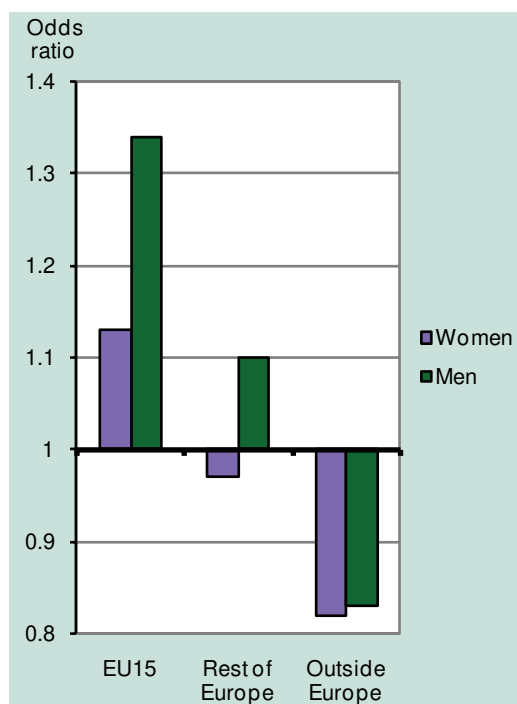


Figure 3. Risk of death among foreign-born residents.

Over- and under-risks (odds ratios) of death for foreign-born residents, by region of birth, 2001–2005. Only people with some form of registered income in the 25–64 age group are included.

Control group (relative risk=1): people born in Sweden. Adjusted for age and sex.

Source: Cause of Death Register, Swedish National Board of Health and Welfare; Longitudinal Integration Database for Health Insurance and Labour Market Studies (LISA), Statistics Sweden.

However, analyses that have attempted to take account of underestimates of the number of deaths indicate that people born outside Europe have a somewhat lower risk of early death than Swedish-born people [6]. This applies particularly to alcohol-related mortality. On the other hand, members of the EU15 group, the majority of whom were born in Finland, run a substantially higher risk of dying early compared with Swedish-born people. This is explained by factors such as higher mortality from cardiovascular diseases, alcohol-related diseases and cancer.

Children of immigrants

Integration into Swedish society is important to the health of those who come to settle in Sweden. This is shown by comparisons between the health of those who have immigrated to Sweden and that of their children who were born in Sweden. Analyses of the ULF surveys provide a fairly consistent picture: the health status and the social situation of Swedish-born children of immigrants are clearly better than that of their foreign-born parents. Interviews of children and young people in the 10–18 age group yield a similar picture. There are slight disparities in self-reported health, for instance in terms of psychosomatic symptoms, between children and young people with foreign backgrounds compared with those of Swedish background in the surveys conducted in 2000–2005 [7].

With regard to serious psychosocial health problems such as suicide [8] and psychoses [9], however, the opposite pattern prevails: children of immigrants run greater risks than immigrants themselves. These problems are at least as widespread – and, in the case of illicit drug abuse, considerably greater – among children who have grown up in Sweden as among their immigrant parents. Growing up in Sweden clearly has advantages and disadvantages in terms of the health of people of foreign origin.

International adoptees

There are many indications that most internationally adopted children in Sweden are in good health. However, children adopted from countries outside Europe, are treated in hospital two to three times more often in their youth for a psychiatric disorder than young Swedish-born people. The risk is even somewhat higher than for young people of foreign origin who have grown up with their biological parents, despite the fact that foreign-born adoptees live in families with better socioeconomic living conditions than those in the average Swedish-born population, and much better conditions than other foreign-born people. This elevated risk for international adoptees is especially pronounced for suicide and suicidal behavior [10].

That mental illness is more common among international adoptees can most likely be attributed to their exposed situation in the country of origin before adoption, with repeated separations, malnutrition and institutional rearing. Nonetheless, one cannot rule out the possibility that variable factors following adoption, e.g. discrimination due to their different physical appearance and difficulties they may have in becoming attached to their new parents, may also contribute to this vulnerability [11].

Diversity of background and health

Immigrants have come to Sweden for many different reasons, at different points of time, from different social situations, and from many countries. The foreign-born population is thus characterised by considerable diversity (heterogeneity).

It is likely that labour immigrants belong to the healthier sections of the populations they are moving away from. In the case of certain groups of refugees, however, a disability or a chronic illness may be a contributing factor to their being granted asylum in Sweden. Thus an adequate description of the health and living conditions of foreign-born people calls for studies that identify foreign-born people who are granted asylum on the basis of these background and

selection criteria. At present there are no regular studies in Sweden of a sufficiently large number of immigrants for this to be possible. Instead, the following sections will discuss significant risk factors and protective mechanisms affecting health among Swedes of foreign background. These factors contribute to the frequent health disparities between Swedes of foreign origin and the rest of the Swedish population.

Risk factors and defense mechanisms affecting health among Swedes of foreign origin can be divided into three categories:

- factors relating to the society and population the person himself/herself or his/her parents has/have moved away from
- factors relating to migration per se and to how migration is dealt with in Sweden
- factors relating to the individual's existence in Swedish society after he/she has obtained a residence permit.

Factors relating to the society of origin

Infectious agents

Many foreign-born people have moved from countries where certain types of severe infectious agents are considerably more common than in Sweden. The most important of these are hepatitis B and C, tuberculosis and HIV. Further direct and indirect contact with the country of origin can expose immigrants to these agents even after they have moved to Sweden.

Helicobacter pylori is an infectious agent whose significance has only been demonstrated in the last two decades. Mainly known for causing stomach ulcers and gastritis, the bacterium is also a significant risk factor for stomach cancer [12]. Contagion usually occurs in early childhood [13]. This probably explains why the bacterium, like stomach cancer, is found significantly more frequently in foreign-born people than in the Swedish-born population (Figure 4) [14, 15]. As transmission occurs primarily within the family, children of foreign-born immigrants also constitute a risk group for helicobacter-associated diseases [15].

Lifestyle

Immigrants arrive in a new country with lifestyle habits formed in the society of origin. These habits will also influence the lifestyle in the new country and, to a certain extent, those of their children as well.

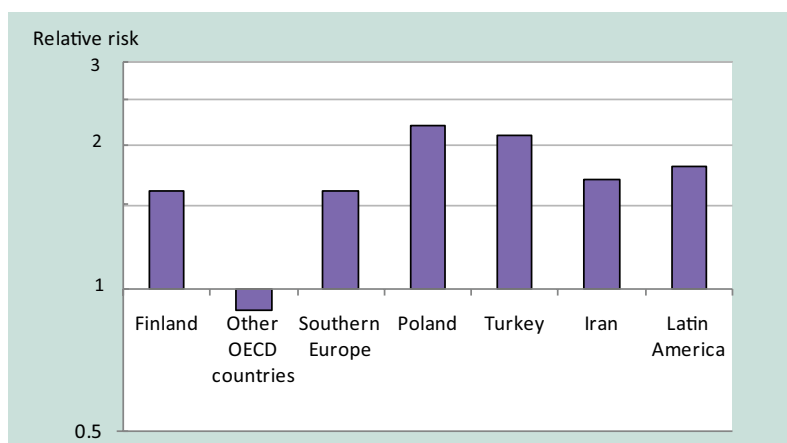


Figure 4. Stomach cancer among foreign-born women.

Over- and under-risk (relative risk) of developing stomach cancer among foreign-born women, by region of birth, 1991–1998.

Note: logarithmic scale on y-axis.

Control group (relative risk=1): women born in Sweden.

Source: Swedish National Institute of Public Health [14].

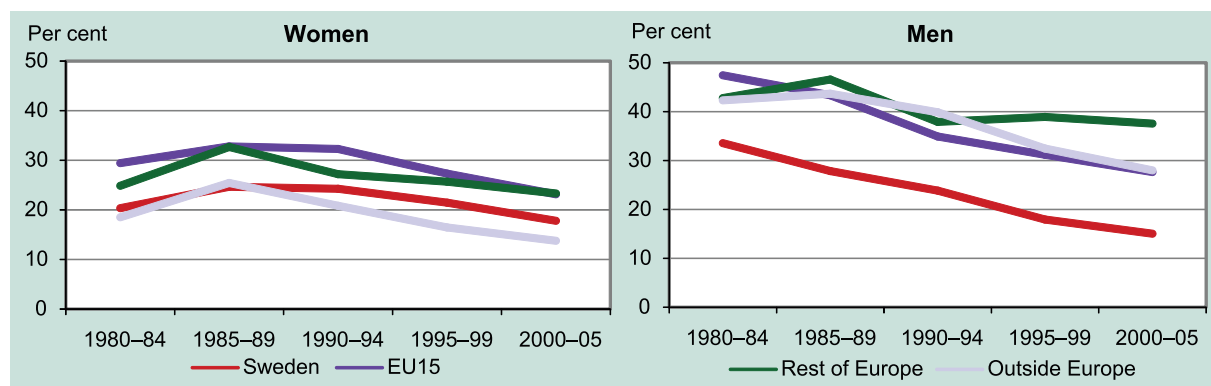


Figure 5. Daily smokers by country of birth.

Percentage of daily smokers by country/region of birth. Women and men aged 16–64, 1980–2005. Standardised by age.

Source: Survey of Living Conditions (ULF), Statistics Sweden.

Food habits

Food habits vary considerably across different societies. This in turn leads to variations in the incidence of many diseases of the gastrointestinal tract, such as colon cancer. These differences are retained to a certain extent among immigrants in Sweden [14]. A low proportion of fibre in the diet heightens the risk of inflammation of the colonic pouches (diverticula) of the colon, so-called diverticulitis. It is therefore likely that the high fibre intake among immigrants from southern Europe and non-European countries, a dietary habit acquired in their country of origin, explains the low risk of diverticulitis within these groups in Sweden [16].

Tobacco

While the percentage of male smokers in Sweden is low, foreign-born men smoke more than men born in

Sweden, according to the Survey of Living Conditions (ULF) (Figure 5). On the other hand, the same study found that Swedish-born men use ‘snooze’²² considerably more often than foreign-born men. Women born in other European countries smoke more than Swedish-born women, whereas women born outside Europe smoke the least. Infants of foreign-born parents are more often exposed to passive smoking in the home [17, 18], mainly the result of smoking by the infants’ fathers, as mothers from most non-European countries smoke less than Swedish-born mothers [19].

The Survey of Living Conditions show that the percentage of smokers has declined gradually since the 1980s. This applies to Swedish-born and foreign-born people with origins in Western Europe and outside Europe, but not to European men from outside the EU15 region, possibly due to the influx of refugees from the former Yugoslavia in the 1990s, which included a large percentage of smokers.

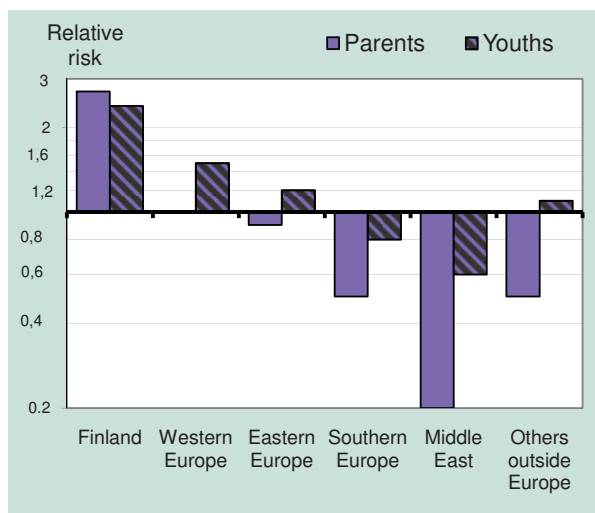


Figure 6. Alcohol-related disorders by foreign origin.

Over- and under-risk (relative risk) of being hospitalised in 1991–2000 for alcohol-related diseases. Young people born in 1968–1979 of two foreign-born parents, and adults born abroad (parents' generation) by adults' country/region of birth.

Note: Logarithmic scale on y-axis.

Control population (relative risk=1): young people with two Swedish-born parents or adults born in Sweden (parents' generation). Adjusted for age and sex.

Source: Hjern A., Allebeck P. [20].

Alcohol

The incidence of alcohol-related disorders in the foreign-born population reflects attitudes and habits formed in the country of origin. Finns are hospitalised for alcohol abuse more often than Swedish-born people, while immigrants from the Middle East are treated in hospital less frequently than native-born Swedes (Figure 6) [14, 20]. The pattern for alcohol abuse among children of foreign-born Swedes lies somewhere between that of their parents and that of children of native-born Swedes (Figure 6). This may indicate that they are more influenced by the alcohol habits of the majority of the Swedish population than by those of their parents. Children in the final three years of compulsory school whose parents come from countries outside Europe drink to the point of intoxication less often than other schoolchildren. This is shown by school surveys conducted in Stockholm in 1996, and in Malmö and Värmland in 2005 [21, 22].

Acculturation, lifestyle and health

An immigrant's lifestyle is also influenced by his/her new society. Social anthropology has coined the term 'acculturation' to describe the cultural influence and cultural transformation that occurs when societies

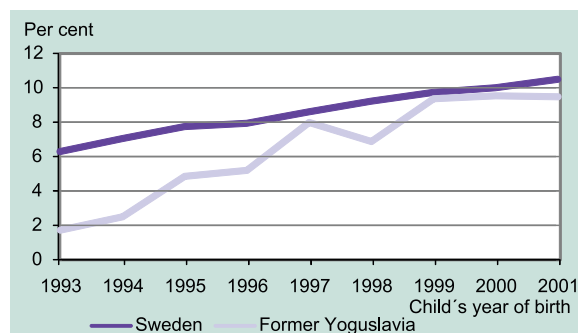


Figure 7. Pregnant women suffering from obesity.

Percentage of pregnant women suffering from obesity from the former Yugoslavia who immigrated to Sweden in 1993–1994, by their child's year of birth.

Based on registration data at prenatal clinics. Obesity (BMI ≥ 30). Source: National Medical Birth Register, Swedish National Board of Health and Welfare.

with different cultural traditions meet [23]. A meeting of this kind often lead to the transformation of an ethnic minority's lifestyle and attitudes under the influence of the surrounding majority population.

Altered eating habits are an example of the significance of acculturation to public health. Studies of Japanese people in the Pacific region in the 1960s and 1970s show how acculturation of Japanese people to North American eating habits led to a marked transformation in morbidity. The studies showed an increased incidence of heart and vascular diseases and colon cancer, and a reduced incidence of stomach cancer [24].

In Sweden, changes in eating habits and diminished physical activity have led to a rapid rise in obesity among certain immigrant groups, for example pregnant women who have immigrated to Sweden from the former Yugoslavia. The prevalence of obesity in this group rose from 2 per cent immediately after immigration to almost 10 per cent after eight years living in Sweden (Figure 7). Even more rapid development of obesity has been observed in refugee children from Chile following their arrival in Sweden [25].

Type 1 diabetes and asthma

Many major public health diseases are caused by environmental factors in combination with genetic susceptibility. As the latter varies across population groups around the world, the risk of developing such a disease can also vary significantly, even where different groups share a similar lifestyle.

Juvenile diabetes is an example of a disease caused by hereditary factors in combination with lifestyle factors. Although the risk is highest among people

born in Finland or Sardinia, it is also high in Sweden compared with most of the world's regions [26]. The incidence of juvenile diabetes among children born in Sweden varies in the same manner, according to their parents' country of birth. Thus the risk of juvenile diabetes among children born in Sweden of Swedish-born parents is five times as high as for children born in Sweden of parents born in Latin America, and three times as high as for those whose parents were born in the Middle East or Eastern Europe [27].

There are major disparities in the incidence of allergic diseases among the various immigrant groups in Sweden. Allergies, for example, are particularly common in population groups of Chilean origin relative to the rest of the population, but significantly less so in population groups of Turkish origin. It is likely that the explanation of these disparities also lies in the interplay of genetic susceptibility and lifestyle factors [28].

Refugee status, the asylum process and undocumented migrants

Immigration to Sweden has been dominated by refugees and their relatives since the mid-1970s. Refugees have a different point of departure than those who move to another country for work or to start a family. People who flee their native country have almost always experienced sustained periods of severe stress before finally moving away. The very act of leaving is often accompanied by privation and threats, and many families become separated for long periods. On arrival in the new country a period of uncertainty awaits during the asylum process before a new life can begin.

Traumatic stress in the country of origin

A large percentage of refugees who come to Sweden have had numerous frightening and abusive experiences in wars or through political persecution before fleeing their countries. The World Health Organisation (WHO) calls such situations "organised violence." A quarter of all Latin American refugees who came to Sweden in the 1970s and 1980s declared that they had been tortured in their native country [14]. As many as 40 per cent of the Kurdish refugees who took part in the 1996 study of immigrants conducted by the Swedish National Board of Health and Welfare reported having been subjected to organised violence in the countries from which they fled [29]. These experiences sometimes lead to the development of post-traumatic stress disorder (PTSD). PTSD is characterised by recurrent painful memories and

disruptions of the brain's stress management system. Another common outcome of such experiences is depression [30].

A systematic review of studies of psychiatric morbidity among refugees in exile in the Western world show that an estimated 8–10 per cent of adult refugees and 7–17 per cent of refugee children suffer from PTSD. Four to 6 per cent of adult refugees fulfil the criteria for depression and almost as many meet the criteria for anxiety syndrome [31]. Although follow-up studies of refugees show that these mental problems diminish over time, mental problems are still more common in refugees 13–14 years after their flight, than in the population of the receiving country [32, 33].

Thus post-traumatic symptoms can cause suffering over a prolonged period. On the other hand, it is less clear to what extent these symptoms also affect refugees' relationships and work capacity. For example, a follow-up of young Cambodian refugees in the United States shows that it is entirely possible to successfully pursue university studies and have a family despite prolonged and severe symptoms of PTSD [34, 35].

The asylum process

A person who applies for asylum is designated an asylum seeker until his/her application has been fully processed by the Swedish authorities. Asylum-seeking adults are entitled to subsidised health and medical care for treatment "that cannot wait," i.e. in cases where a moderate delay could lead to adverse consequences for the patient's health [36]. Asylum-seeking children, on the other hand, have had the same rights to health and medical care as other children in Swedish society since 1994.

As asylum seekers lack a Swedish identification number, the ability to study their health as a group living in Sweden is limited. An identification number would make it possible to identify them in the national health registers.

Predominant health problems among adult asylum seekers are mental illness and various psychosomatic complaints [36–40]. This is borne out by Danish studies showing that asylum seekers are hospitalised following suicide attempts three times as frequently as the general population [41]. Stress during the asylum process is particularly harmful to refugees with traumatic experiences of organised violence in their country of origin [42].

A Swedish study of mass evacuees from Kosovo with provisional residence permits in Sweden showed that the number of refugees who fulfilled the criteria for PTSD rose in proportion with the length of time

they had been in Sweden. The study's findings, based on analyses of cortisol patterns, indicated that their bodies' stress management systems were being gradually transformed [43]. Interview studies of refugees in Australia, who live in uncertainty over their provisional residence status, show similarly high levels of mental ill-health, which also rise with the period of uncertainty [44].

Many children also show signs of significant mental ill-health during the asylum period [45]. Asylum-seeking children are greatly over-represented among children in in-patient child and youth psychiatric care [46]. In 2002–2005, hundreds of asylum-seeking children developed severe and prolonged loss of functioning [47]. Many of these children needed intensive support for long periods, including drip feeding and help with toilet visits. The number of children who have developed the syndrome has fallen sharply following changes in refugee policy in 2005, and as a result of improved support for families where asylum-seeking children are in poor mental health. With few exceptions, the children who became ill also recovered, often after a long period of rehabilitation, during which they gradually regained their ability to function normally [48].

Support from family and friends

During the initial period of settling in a new country, refugees' social networks are usually sparse. Parts of their family are often in another country and they have not yet had time to establish close social contacts in exile. Interview studies of refugee families in Norway [49], Sweden [45] and Australia [50] show that support from family and friends is vital to refugees' mental health during their first years in a new country. In most cases they develop new contacts within their own refugee group. An American study of refugees from Laos shows that refugee policy can play an important role here. The study found that being reduced to living in a place where for geographical reasons it was difficult to establish contacts with members of one's own group was a strong risk factor for poor health [51].

Undocumented migrants

People who live in Sweden without a residence permit and who are not asylum seekers are sometimes referred to as undocumented migrants [52]. Most of these are asylum seekers who have had their residence permit applications rejected, or labour immigrants without a work permit [53]. It is impossible for obvious reasons to calculate precisely how many

undocumented migrants are living in Sweden at any given time. The estimated number in 2003–2004 was around 20,000 [54].

According to the present Swedish legislation of 2012 adult undocumented migrants are only entitled to 'immediate' health and medical care – a very narrow interpretation of emergency treatment. They are also liable for payment for care received [36]. This has stirred a lively discussion within the medical profession. In Stockholm, Gothenburg and Malmö, special medical clinics for undocumented migrants have been opened on a nonprofit basis [55, 56]. In 2000, the Government and county councils reached an agreement to the effect that children of families who had their application for asylum rejected would have the same rights to health and medical care as other children in Sweden. However, access to health and medical care by children in other groups of undocumented migrants remains as limited as that afforded to adults. In June 2012 the Swedish government announced that a new legislation will be implemented from July 2013 regarding the rights for health and medical care of undocumented migrants. According to this new legislation, undocumented migrants will have the same rights to care as asylum seekers, see above.

Individual county councils have on their own initiative broadened the rights of irregular migrants to medical care but receive no reimbursement from the government. In 2006 Sahlgrenska Hospital in Gothenburg became the first hospital in Sweden to give undocumented migrants greater rights to medical care. In March 2008, Skåne county council followed suit, introducing similar rules for both in- and out-patient care [57].

In the summer of 2005, Doctors Without Borders conducted an interview survey with patients who visited the organisation's medical clinic for undocumented migrants [56]. Half the respondents reported that they had previously refrained from seeking medical care out of fear of being reported to the police or because they knew of no caregiver who would accept them.

Living in Sweden with a foreign background

A socially vulnerable situation

Immigrants are newcomers to Swedish society. Moreover, they are exposed to discrimination in a range of contexts and situations and are thus more often socially vulnerable than other people. Compared to the rest of Sweden's population, immigrants are more likely to be unemployed, often have

jobs in poor physical and psychosocial work environments, and often live in confined circumstances in low-status neighbourhoods. There are also major disparities among different immigrant groups. Non-European immigrants as a rule have poorer material living conditions than immigrants of European origin. As adults, children of immigrants enjoy better material living conditions in general than their parents [4].

Immigrants' incomes are closely linked to the length of time they have lived in Sweden. It takes at least ten years for an immigrant to attain economic living conditions comparable to those of the rest of the population. Nevertheless, foreign-born immigrants generally improve their living conditions faster than other low social status groups in Swedish society. However, this was not the case in the crisis years of the 1990s, rather the reverse: the material living conditions of foreign-born immigrants deteriorated more than that of other groups. Unemployment rose significantly more among foreign-born than Swedish-born people. The refugees who arrived during these crisis years have also had a more difficult time establishing themselves in the labour market than those who arrived earlier [4].

Discrimination and mental ill-health

Discrimination affects the living conditions of immigrants. Discrimination in the labour market is a significant factor in low incomes and unemployment. Discrimination in the housing market combined with relative poverty leads to increased concentration of the foreign-born population in low-status neighbourhoods and a decline in the percentage of Swedish-born residents in these areas [52].

Immigrants with origins in Northern Europe or other Western-oriented countries have roughly the same opportunities as Swedish-born people to settle in attractive residential areas. For immigrants with origins in non-Western-oriented countries outside Europe, however, such opportunities are very limited, even long after they have settled [58]. Immigrants of non-European origin are more likely to be victims of violence and threats of violence because they more often live in low-status neighbourhoods [4].

Discrimination can affect health indirectly as a factor leading to poorer living conditions. In addition, repeated experiences of discriminatory treatment have a more direct effect on one's health. Recurring discrimination can be viewed as a form of chronic stress where the person discriminated against always expects to encounter negative reactions from his/her surroundings [59]. Immigrants who feel discriminated against report being mentally ill twice as often as other immigrants, according to the 1996

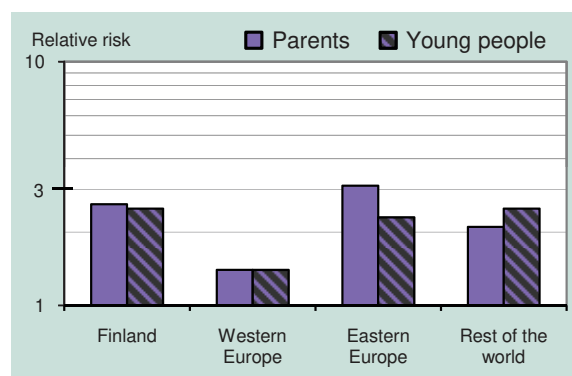


Figure 8. Psychotic disorders by foreign origin.

Increased risks (relative risk) for youths born in 1968–1979 with two foreign-born parents as well as for adults born abroad (the parents' generation) of being treated in hospital in 1990–2001 for schizophrenia, by the adults' country of birth/region of birth.

The control population (relative risk=1) consists of youths having two Swedish-born parents or adults born in Sweden (the parents' generation). Adjusted for age and sex.

Source: Hjern, A., Wicks, S., Dalman, C. [9].

Immigrant Study by the Swedish National Board of Health and Welfare [60, 61] and the 2006 Public Health Survey conducted by the Swedish National Institute of Public Health [5]. Although these cross-sectional studies have not established a causal connection, a large number of other studies around the world have shown that discrimination based on colour of skin leads to poorer self-reported health [62].

Studies have shown a higher incidence of psychotic illnesses among immigrants in countries such as Great Britain, Holland and Denmark [63]. Several studies have pointed to the fact that chronic stress arising from perceived discrimination may be one of the reasons for the higher risk of psychoses among immigrants [64, 65]. In Sweden, too, immigrants and children of immigrants are admitted to hospital two to three times as often as others for schizophrenia and other psychoses (Figure 8). This significant risk can to a large extent be accounted for by social factors such as low incomes, single parenthood and by the fact that those affected live in low-status neighbourhoods. Discrimination is probably an important contributing factor here [9]. These factors are also behind the increased risk among young people with foreign backgrounds of being treated in hospital for suicide attempts or acts of deliberate self-harm [66] and of being injured through violence [67].

Unintentional injuries

Social factors have an important role in morbidity and mortality from accidental injuries. Overall,

however, mortality from accidents in Sweden is approximately the same for children and young people of foreign origin as for those of Swedish origin. Nevertheless, patterns vary with different types of accidents. Foreign-born children and young people are less likely to be injured in moped and car accidents before the age of 18. They are also treated significantly less often in hospital for injuries that usually occur in the outdoors and in holiday homes, such as snakebites, boating-related injuries and accidental poisoning from chemical agents used in gardening and agriculture. This pattern reflects social disparities in childhood and adolescence: lack of material resources can sometimes be a protective factor in these circumstances. Burn injuries caused by hot water, however, are more common among children of non-European origin under the age of 3 [68]. Drowning accidents during outdoor bathing have also been reported more often among schoolchildren of foreign origin. This is probably owing to their poorer swimming skills.

Where Swedes differ

In some cases, health disparities between Swedish-born and foreign-born people can be accounted for by successful Swedish public health initiatives, programmes and policies. Sweden has been a world leader in the development of certain types of public health measures. This applies particularly in areas such as child injuries, caries prevention and corporal punishment of children. Public health work in these fields has involved public campaigns promoting the benefits of brushing one's teeth, only eating sweets on Saturdays, swimming skills and child car safety seats. Sweden was also the first country in the world to introduce a law, in 1979, prohibiting corporal punishment of children. Newcomers in Swedish society naturally do not share this collective experience; thus it is not surprising that children with foreign backgrounds, regardless of their parents' origin, are less likely to know how to swim, have caries more often, more often travel in cars without a safety seat and are more frequently subjected to corporal punishment [68].

Public health measures

There is a significant risk that public health measures specifically targeting foreign-born people, or groups of foreign-born people with a particular background, will lead to perceived stigmatisation and a stronger sense of discrimination. As a result, such initiatives should have a firm scientific basis and be in demand within the minority group concerned. Measures

against infectious diseases, such as tuberculosis, hepatitis B and HIV, are examples of measures that fulfil these criteria [69].

Few people in Swedish society are as dependent on Swedish law and the Swedish authorities as asylum seekers. Sweden is one of the countries in Europe that restricts the right to medical care for people without a residence permit [70]. These rules will have primarily affected the health of asylum seekers and undocumented immigrants by preventing them from receiving treatment for their illnesses and help with their disabilities. However, they also affect the health of the rest of the population, since contagious diseases among people with limited rights to medical treatment are identified late in the course of the disease and therefore spread more easily.

Asylum-seeking adults and children have many psychiatric and psychosomatic symptoms. Offering meaningful activities and social support to asylum seekers can prevent these to some extent [71]. Meaningful activities in the case of children include pre-school and school attendance, while for adults, it includes education plus the opportunity to be gainfully employed.

All newly arrived refugees are offered an introductory programme in the municipality where they reside. While the primary aim of the programme is to help refugees enter the labour market, it also contains general information about Swedish society and Swedish language instruction. This introduction is also a useful platform for public health work; refugees can for example obtain information about the successful Swedish public health programmes on caries prevention, accidental injury prevention and corporal punishment. Another method that has been tried in this context involves secondary preventive methods aimed at identifying refugees with severe psychiatric problems [72].

Analyses of health trends as a basis for prioritising and evaluating previously implemented initiatives are essential to successful public health work at national level. At present, the ability of the Swedish National Board of Health and Welfare to monitor health trends among people of foreign origin or background is more limited than for the population at large. Repeated interview surveys, such as the Survey on Living Conditions (ULF) and the Level-of-Living Survey (LNU), include too few interviewees of foreign origin to be able to capture the heterogeneity of this section of the Swedish population. The Swedish National Board of Health and Welfare accordingly undertook a special interview survey of four different groups of immigrants in 1996 [60]. If such studies were carried out on a regular basis, there would be a better basis for decision-making

regarding public health measures that affect the population of foreign origin.

Social vulnerability and discrimination are the principal causes of ill health among the population of foreign origin in Sweden. Counteracting these processes is an essential part of public health work on behalf of this section of the population.

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Notes

1. A Finnish-speaking settlement existed in the area around the Torne River during the Middle Ages. When Sweden ceded the eastern half of its kingdom to Russia in 1808–9, the area was effectively divided. Notwithstanding this, the Tornedalers on both sides of what is now the Swedish/Finnish frontier have preserved their language and cultural heritage.
2. Swedish 'snus'. A moist powder tobacco product originally derived from a variant of dry snuff in the early 19th century in Sweden. It is consumed by placing a small wad under the upper lip.

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