
Society, Health, and Health Care in Sweden

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The epidemiologist Geoffrey Rose (1985: 34) argued that if we are to understand the incidence and prevalence of disease in a society, “we need to study characteristics of populations, not characteristics of individuals.” There are probably three major social determinants of population health, namely material wealth, social structure (i.e. political climate, occupational structure, social networks, health care organization), and lifestyles (behaviors), which are intimately related. In order to determine which factors may cause or prevent disease and illness, historical changes are important. Blau (1977) argued that the size and number of different population groups are important constituents of a society or a collectivity as are, changes in numbers; size also changes the social relations between groups of people. We may hypothesize that changes in social indicators may change population health, and that the share of such indicators in the population contribute to health differences between populations. Notions of “healthy” and “unhealthy” societies are relevant in this respect (Qvarsell 1994; Wilkinson 1996). I will attempt a brief analysis in this area by comparing some population characteristics of Sweden with those of other countries. This will include a description of the development of socioeconomic differences in health in Sweden, as well as a basic description of Swedish health care organization. Equality topics have been central in Swedish (and Nordic) medical sociology, and the description below is tilted toward such research (sociology in medicine).¹

Sweden has been recognized as having lower mortality than most other affluent countries (Thom et al. 1985). In 1996, Swedish men can expect to live 76.5 years, and only the male population in Japan has a higher life expectancy (77 years). The life expectancy for women in Sweden is five years above that of men (81.5 years) – less than half a year shorter than that of women in Switzerland, France, and Hong Kong, and two years shorter than in Japan, as shown in table 17.1. Life expectancy may be a crude indicator of population health,

Table 17.1 Sex-specific life expectancy at birth for a selection of primarily low mortality countries in descending order

<i>Country and year(s)</i>	<i>Women</i>	<i>Country and year(s)</i>	<i>Men</i>
Japan (1996)	83.59	Japan (1996)	77.01
Switzerland (1995–6)	81.90	Sweden (1996)	76.51
France (1995)	81.86	Hong Kong (1996)	76.34
Hong Kong (1996)	81.82	Iceland (1995–6)	76.20
Sweden (1996)	81.53	Switzerland (1995–6)	75.70
Norway (1996)	81.07	Israel (1994)	75.49
Australia (1994–6)	81.05	Norway (1996)	75.37
Canada (1992)	80.89	Cyprus (1994–5)	75.31
Italy (1994)	80.74	Australia (1994–6)	75.22
Belgium (1994)	80.61	Greece (1995)	75.02
Iceland (1995–96)	80.59	Singapore (1997)	75.00
Finland (1996)	80.52	Malta (1996)	74.94
Spain (1990–1)	80.49	Canada (1992)	74.55
Greece (1995)	80.20	The Netherlands (1995–6)	74.52
The Netherlands (1995–6)	80.20	Italy (1994)	74.34
Austria (1996)	80.19	United Kingdom (1996)	74.31
Malta (1996)	79.81	Maccou (1990–5)	74.30
Cyprus (1994–5)	79.75	Austria (1996)	73.93
Germany (1994–5)	79.72	France (1995)	73.92
United Kingdom (1996)	79.48	Belgium (1994)	73.88
Israel (1994)	79.38	Cuba (1990–5)	73.50
Maccou (1990–5)	79.30	New Zealand (1992–4)	73.44
Singapore (1997)	79.20	Spain (1990–91)	73.40
New Zealand (1992–4)	79.11	Germany (1994–5)	73.29
Luxembourg (1990–5)	79.00	Finland (1996)	73.02
USA (1995)	78.90	United Arab Emirates (1990–5)	72.90
Portugal (1995–6)	78.57	Costa Rica (1990–5)	72.89
Puerto Rico (1990–2)	78.50	Denmark (1994–5)	72.62
Slovenia (1995–6)	78.25	USA (1995)	72.50
Chile (1997)	78.10	Brunei (1990–5)	72.40
Ireland (1990–2)	77.87	Ireland (1990–2)	72.30
Denmark (1994–5)	77.82	Chile (1997)	72.13
Costa Rica (1990–5)	77.60	Luxembourg (1990–5)	72.10
Cuba (1990–5)	77.30	Panama (1995)	71.78
Czech Rep. (1996)	77.27	Portugal (1995–6)	71.27
Brunei (1990–5)	77.10	Slovenia (1995–6)	70.79
Poland (1996)	76.57	Czech Rep. (1996)	70.37
Panama (1995)	76.35	Sri Lanka (1990–5)	69.70
Slovakia (1995)	76.33	Puerto Rico (1990–2)	69.60
United Arab Emirates (1990–5)	75.30	Bosnia-Herzegovina (1990–5)	69.50
Bosnia-Herzegovina (1990–5)	75.10	Slovakia (1995)	68.40
Sri Lanka (1990–5)	74.20	Poland (1996)	68.12
Russia (1995)	71.70	Russia (1995)	58.27

Source: Demographic Yearbook 1997, table 22. New York: United Nations 1999.

nevertheless it is often used to compare the health situation between countries (e.g. Preston 1975; Wilkinson 1996). So by this health measure, Sweden seems to be one of the healthiest societies; only Japan is clearly healthier than Sweden in this respect. In the list of countries in table 17.1, one could note that some developing countries (Cuba, Costa Rica, Chile) have as long or longer life expectancy than a number of more affluent countries (USA, Denmark, Finland, Ireland), indicating that economic prosperity only partly explains population health.²

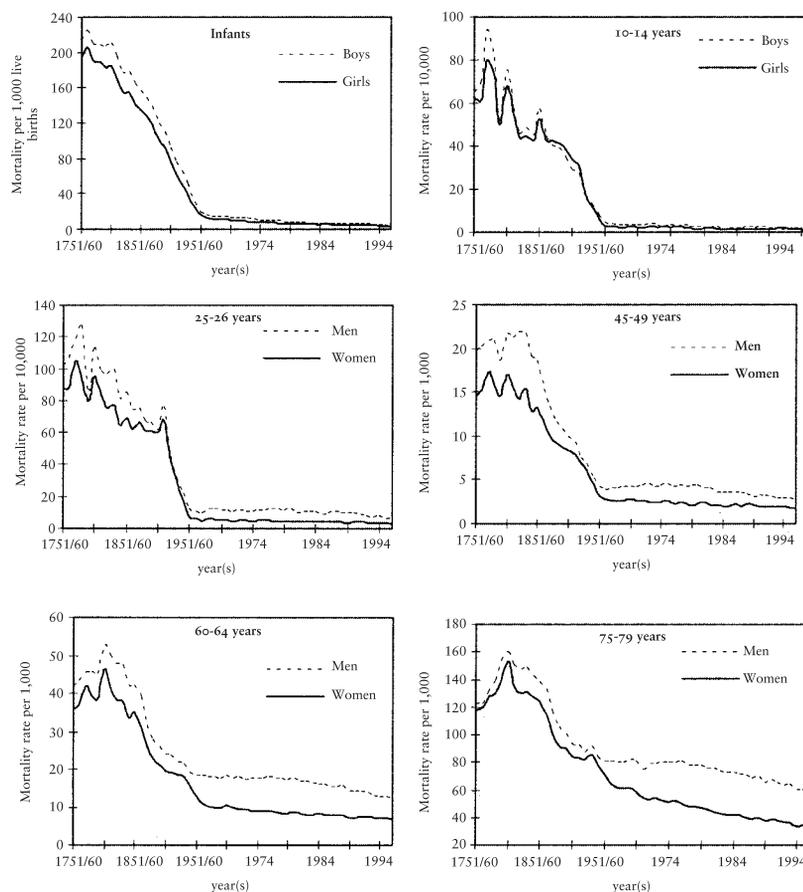


Figure 17.1 Long-term development of sex-specific mortality in Sweden in sex selected age groups. For the period 1751–60/1951–60 data are ten-year averages; for 1961/5 five-year average and for 1966–96 annual data are given

Sources: Historical statistics of Sweden. Part 1: Population (second edition). Stockholm: Statistics Sweden, 1969 [for the period 1751/60–1967]. Causes of death 1968–96. Annual reports, published by Statistics Sweden for the years 1968–93, and by The National Board of Health and Welfare for the years 1994–6.

TRENDS IN MORTALITY AND ILLNESS IN SWEDEN

The long-term development of mortality in Sweden is shown in figure 17.1. In all age groups there was a steep mortality decline in the century from 1850 to 1950 (the exception to this was a mortality increase among young adults in 1910–20). For older persons the decline started around 1800, and for infants already in the eighteenth century. In the age span of 10–50 years there were rather strong fluctuations during most of the period before 1850. After 1950, Swedish women of all adult age groups experienced a continuation of the declining trend, and for women in the age group 75–79 years the decline was only slightly less steep than in the period before 1950. Middle-aged men experienced a slight increase, and older men a stagnation, in the 1960s and 1970s.

There are no data on long-term trends in ill health. From 1975 there are annual national surveys including a number of components of social living conditions and ill health indicators. Self-perceived general health is a good indicator of an individual's health status, probably less biased by propensity to seek contact with health care professionals than most other health indicators. Nearly all groups reported better health in 1995 as compared with 1975 as seen in figure 17.2. The only exception to this was for women aged 25–44, although the prevalence of self-reported illness is very low (<3%) before 45 years of age, and changes therefore are indeed small. Women and men report ill health roughly to the same extent. We should note that 45–64 year-old men had an excess in ill health over women in 1975 which had disappeared 20 years later. This corresponds well with the development of male mortality in these ages in the period. In fact, this was the only age group where there has been any notable narrowing of the mortality gender gap in Sweden (Hemström 1998: 19). In sum, declining mortality and improved health has characterized the development in Sweden in the last two decades.

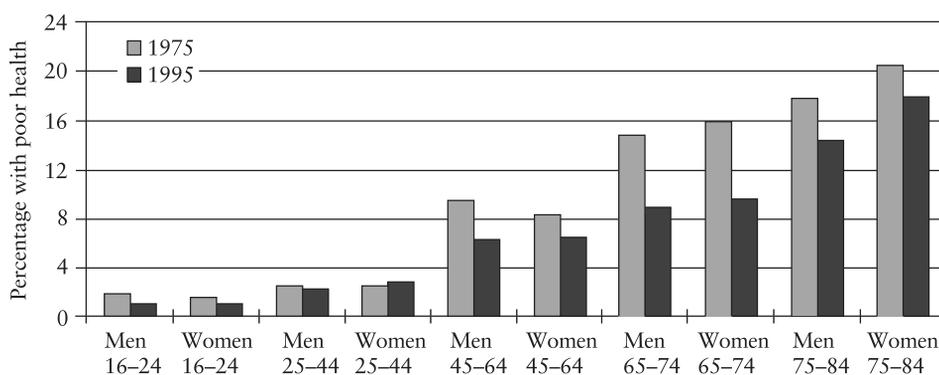


Figure 17.2 Proportion with self-perceived general health as poor for Swedish men and women in five age groups in 1975 and 1995

Source: Statistics Sweden 1997a. Data from Swedish Surveys of Living Conditions (ULF).

ARE SOCIAL STRUCTURES AND LIFESTYLES HEALTHY IN SWEDEN?

Occupational Structure, Poverty, and Social Cohesion

The proportional size of socioeconomic classes are plausible explanations of health variation across time and countries. The replacement of manual by non-manual work probably is a major force of secular mortality decline. In Sweden, changes in the proportion of non-manual workers in manufacturing industry was related to men's as well as to women's mortality decline after 1945 (Hemström 1999a). By European standards, Sweden seems to have a relatively healthy class structure. Data from Kunst (1997: 94), for men aged 45–59 years,³ show that Denmark, Sweden, Switzerland, Norway, and Italy had about 50 percent non-manual workers around 1980. The corresponding figures were about 45 percent for France and United Kingdom, 36 to 39 percent for Ireland and Finland, and 31 to 33 percent for Portugal and Spain.⁴ For Sweden, and a number of European countries, the term “service” or “non-manual society” was relevant already in the 1980s. The average skill level of jobs has increased since then. The corresponding proportion of non-manual workers were 55 percent in Sweden in 1990.⁵

The social class structure should be related to the educational level of the population. Survey data from 11 European countries show that the proportion of the population that have completed more than a basic education was clearly largest in Switzerland⁶ (Cavelaars et al. 1998). Sweden was somewhere in the middle, although Norway, France, Italy, and Spain have clearly lower proportions of people above basic educational levels (ranging 14–46%) than has Sweden (55% among men and 54% among women) in ages 25–69 years.

From national surveys it has been observed that, no matter the type of poverty measured, poor people more often report ill health than others. In Sweden, the proportion of poor people has increased in the 1990s (Halleröd 1999). Halleröd found that those defined as materially poor (by household consumption characteristics) report particularly poor health in Sweden. In comparative research poor people in Sweden tend less often to be old people or single parents, but instead young adults (Halleröd 1999; Saunders, Halleröd, and Matheson 1994). The rapid increase in youth unemployment in the period 1991–3 is one reason for the concentration of poor people among young adults. Social policy may explain why old people and families with children make up relatively low proportions of poor people in Sweden (Halleröd 1999).⁷ Shortcomings in this policy may partly explain why young adults often are poor today. For instance, most welfare revenues are based on the “income-loss” principle and previous employment. Youth unemployment has until recently been low in Sweden, and the shortcomings not widely recognized.

Nevertheless, Sweden (and other Nordic countries) has among the lowest proportions of poor people in western Europe, around 6 percent by a European standard (Vogel 1997: 634). Southern European countries, United Kingdom, and Ireland have considerably higher proportions of poor people (15–47%). Thus, Sweden still has a low proportion of poor people, which may contribute

to its internationally low mortality rates. The situation seems to be particularly favorable among old people. Poverty decreased by three different measures in the age group 65–74 years between 1986/7 and 1994/5 (Halleröd 1999).

Income inequality and social cohesion are also thought to be related to population mortality rates and life expectancy (Wilkinson 1996). The issue of income inequality and health is far from unproblematic, since different measures could lead to different conclusions (Judge et al. 1998). Whether income inequality is an important determinant of population health or not, Sweden belongs to one of the five countries in Europe (Denmark, Norway, Finland, Sweden, and Belgium) with the lowest such inequality in the early 1990s (Björklund 1998).⁸ There was a trend toward greater income inequality in Sweden between the 1980s and 1990s, which seems to have been more of a general trend in many countries, although reduced income inequality occurred in Italy, Belgium, and Norway (*ibid.*).

It has been shown that the degree to which people are members of voluntary associations (as one example of how social cohesion can be measured) are related to health status both at individual and aggregate level (Carlson 1998). The greater the proportion of members in civil associations (excluding religious and political ones),⁹ the better the health tends to be. Carlson observed that especially the Nordic countries and the Netherlands have high proportions of people in such associations (*ibid.*: 1360). This measure of social cohesion and low income inequality may both contribute to relatively favorable survival in Sweden. This should apply equally to the Netherlands and Norway – which also have been found to have low mortality for long periods (Thom et al. 1985). Denmark were among these until the 1980s, but the development of Danish survival has been less favorable in recent times, probably due to increased alcohol consumption, high prevalence of smoking, and increased relative poverty and social isolation (Chenet et al. 1996; Osler 1999).

The indicators presented above should be viewed as the beginning of a more detailed large-scale analysis. Obviously, there are unfavorable social indicators for Sweden also, such as relatively high proportions of immigrants and social isolation. Social isolation increased from 16 to 21 percent between 1975 and 1995 (Vogel 1997). Immigrants have poorer health than other Swedes, and their social situation, compared with native Swedes, is unfavorable for indicators such as unemployment, poor social network, and financial difficulties (Emami 1997; Vogel 1997). Vogel observes that immigrants, young adults, and lone parents are the groups who have experienced the greatest decline in social conditions in the 1990s.

Lifestyle Factors

A number of lifestyle indicators show a change toward healthier behavior in Sweden in the period 1975–85, especially cigarette consumption which is related to cardiovascular diseases, certain cancers, and respiratory diseases. As shown in figure 17.3a, per capita alcohol consumption was reduced between 1975 and 1985, but has been relatively stable after that year. Dietary changes may be more

complex, although at least fat and butter consumption show a decreasing trend after 1984 in figure 17.3b. The decline in cigarette smoking has clearly contributed to the narrowing of the gender gap in mortality after 1980. This is especially the case for the rapid decline in mortality from ischemic heart disease among men (Hemström 1998, 1999a).

Differences in per capita cigarette and alcohol consumption may help to explain part of country differences in health and survival. Data on per capita alcohol consumption for 38 countries showed that the only countries in Europe having lower consumption than Sweden were Norway, Iceland, and Turkey (FHI and CAN 1997). France, Portugal, and Hungary are examples of high

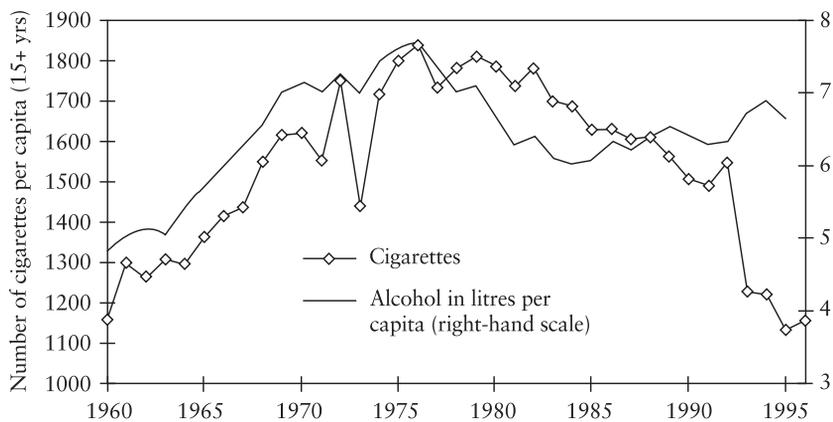


Figure 17.3a Trends in cigarette and alcohol consumption in Sweden, 1960–95
Source: Swedish Statistical Yearbooks (cigarette consumption) and FHI and CAN (1997).

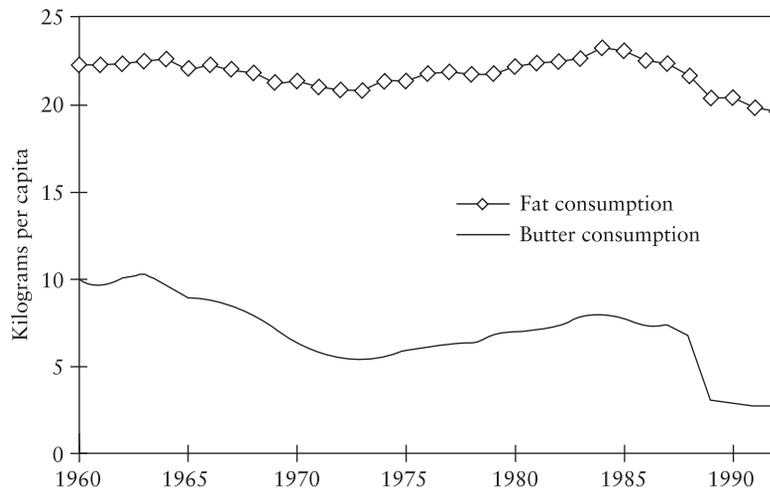


Figure 17.3b Trends in fat and butter consumption in Sweden, 1960–92
Source: Own calculations from data given in Swedish statistical yearbooks, published by Statistics Sweden (butter consumption was used in Hemström 1999a).

consumption countries.¹⁰ For a number of European countries, recent data on gender-specific smoking prevalence by country is given in figure 17.4. Data are from national surveys during the period 1991–5. Sweden has the lowest prevalence of smoking for men (22%). For women, the lowest smoking prevalence is found in Italy (17%). Swedish women had a higher smoking prevalence than men (24%). This however, is a lower prevalence than for men in all other countries and clearly lower than for women in Denmark, Norway, and the Netherlands (above 30% female smokers).

Thus, for smoking and alcohol indicators, Sweden tends to be among the healthier populations in terms of prevalence rates and per capita consumption. This holds true particularly for Swedish men (when compared to men in other countries). There may be other lifestyle indicators which may not have developed in a similar favorable direction in Sweden, such as increased urbanization and more sedentary lifestyles.

Development of Socioeconomic Differences in Health

It is believed that social and health policy in Sweden has substantially narrowed health and survival differences between population groups. For instance, in the Black report it was suggested (without any statistical facts) that inequalities in health had disappeared in Sweden (Townsend and Davidson 1992). Considerable Swedish research has now demonstrated that socioeconomic differences in mortality (and excess mortality among manual workers) exists in infancy, childhood (Östberg 1996), throughout adulthood to old age (Diderichsen 1991; Otterblad-Olausson 1991; Vågerö 1992) and for men and women (Vågerö and Lundberg 1995). Morbidity measures – physical as well as mental – point in a similar direction (e.g. Lundberg 1990, 1992). Trends indicate a widening of mortality differences from the 1960s until the first half of the 1980s (Vågerö and Lundberg 1995). Industrial workers' mortality rate increased among men aged 45–69 years during the 1970s when women and men in non-manual occupations experienced a continued mortality decline (Diderichsen and Hallq-

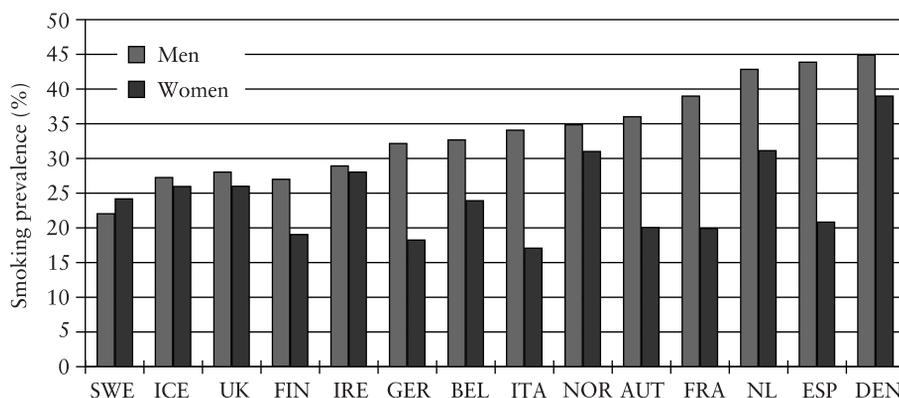


Figure 17.4 Gender-specific prevalence of smoking in a number of European countries
Source: Statistics Sweden 1997b.

vist 1997, 1998). In the latter half of the 1980s however, differences between manual and non-manual occupational groups did not grow (Gullberg and Vågerö 1996). Recent data show that unskilled female workers have not experienced any reduction in mortality from the 1980s to the 1990s, so that occupational class differences tend to increase among women while these have not changed among men (Lundberg 1998a).

In comparative research, the relative mortality difference between manual and non-manual workers is the same in Sweden as in most other western European countries, that is around 1.4 times excess mortality among male manual workers (Mackenbach et al. 1997). Comparing the mortality rates, it becomes clear that both manual and non-manual Swedish workers have low absolute mortality in relation to other countries (Vågerö and Erikson 1997).

Sweden seems to have some of the largest health inequalities by educational level, both among men and women (Cavelaars et al. 1998). In comparison to mortality, prevalence rates of ill health show greater variation between western European countries which might be due to methodological inconsistencies, including differences in non-response patterns in different surveys. However, since excess mortality among manual workers exists in all countries for which data are available, no matter the cause of death structure (Kunst 1997: 117), and from infancy to old age (Vågerö 1992), it is suggested that explanations are embedded in the social structure of society (Lundberg 1998a).

Lundberg (1990, 1992) found three important explanations to social class differences in morbidity in Sweden: the physical work environment, health behaviors like smoking and alcohol consumption, and childhood living conditions. In a later article, he notes that the contribution from health behaviors tend to increase relative to the work environment and childhood conditions (Lundberg 1998a). Lifestyle factors (e.g. alcohol drinking habits, smoking, and risk taking) are probably more important predictors of mortality than of morbidity, while working conditions may be more important determinants of morbidity (Hemström 1998). The widening mortality differences between socioeconomic groups and between men and women in Sweden during the period 1960–80 may have changes in alcohol and cigarette consumption as common explanations. After the 1960s, alcohol-related mortality has become more common among manual workers in Sweden – also relative to non-manual workers (Leifman 1998). A similar class-shift applies to smoking behavior.

Women's Employment and Health

International comparisons of occupational classes have a severe gender bias in that women may be incorrectly classified. It is debatable how women should be classified; on their own, by a household, or by a husband's class (Erikson 1984). Because traditionally there has been a relationship between family status and employment status for women (few wage-earning married mothers), we may postulate that the gender system cut across other measures of socioeconomic position for women. One outcome is the smaller class differences in health

among women than among men that are widely reported (Koskinen and Martelin 1994; Vågerö and Lundberg 1995; Vallin 1995; Lundberg 1998a). Professional women may more often be unmarried and childless relative to professional men (Emslie, Hunt, and Macintyre 1999).¹¹ European comparisons of women show that educational differences in illness are relatively larger in Scandinavian countries than in the Netherlands, Switzerland, Germany, and Spain (Cavelaars 1998: 22). This is not surprising because Scandinavian countries have high proportions of employed women, in particular among women aged 55–64 years (Vågerö and Lahelma 1998: 75). If we recall that differences in work environments are important explanations to socioeconomic differences in ill health (Lundberg 1992), we should find larger health inequalities among women when labor force participation is high. When labor force participation is low, a large proportion of women have relatively similar (unpaid) work environments in the home, which cannot cause any great variation in illness among women.

Sweden is a suitable case for analyzing the health effects of increased female employment. It has been debated whether paid work is beneficial or harmful for women's health, although most evidence points at prolonged lives for employed women (Vågerö and Lahelma 1998). When the increase in women's employment was the greatest in the 1970s (from 54% to 72% employed women), women to a large extent entered relatively "healthy jobs," that is jobs characterized by low mortality rates (Hemström 1999b). Although Swedish women's mortality declined throughout the 1970s and 1980s, high rates of female smoking may have counteracted any survival benefits from increased employment rates (Nathanson 1995). Danish women, for instance, had nearly 40 percent smokers in the 1990s (figure 17.3a), and they had little improvement in survival during the 1980s (Chenet et al. 1996).

In the period 1981–91 structural changes may have disproportionately hit traditional female jobs in the public sector with increased job stress and job insecurity (Szulkin and Tåhlin 1994). Health care work, care for the elderly, and teaching work are among these occupational groups.

THE SWEDISH HEALTH CARE SYSTEM IN TRANSITION

Roemer (1985: 31) distinguished five components used to describe a country's health care system, which I will partly follow below: organization of programs (governmental, voluntary, private), production of resources (e.g. manpower, facilities), economic support (charity, voluntary, or social insurance, governmental revenues), management (planning, regulation, evaluation), and delivery of services (primary, secondary, tertiary).

Organization of Programs

In 1968, health and social issues were integrated under the Ministry of Social Affairs (National Board of Health and Welfare [NBHW] 1977). It is stated that "Swedish health care has a decentralized organization. By law the national

parliament (Riksdagen) sets goals and demands for health care”¹² (NBHW 1998: 73). Typical goals are equal access to health care and universal inclusion of all citizens. The latter is a common feature of many European countries, although in the US only about 40 percent of the population are covered by insurance for hospital care (Jönsson 1990).

Decentralization refers to the relatively independent role played by the county councils in Sweden (23 today) which are responsible for health care delivery in their geographical areas (NBHW 1998), including the right to collect regional taxes. Each county council has at least one major hospital. The health care act of 1982 clearly gives the prime responsibility for health care within the county councils (Lindgren 1990). Within the county councils there are a number of primary care centers (“Vårdcentraler”). After a reform in 1994 individuals in a catchment-area of a primary care center could choose their own family physician (Andersen, Smedby, and Vägerö 1999).

The vast majority of health care is provided by the public sector in Sweden (Lindgren 1990), although the number of private hospitals (often small-scale) has increased greatly in the 1990s (280). Today, they outnumber large-scale public hospitals (86) (NBHW 1998). About 20 percent of hospital beds are now in the private sector (Diderichsen 1999). It is particularly nursing homes and ambulatory home care facilities that are now privately run in Sweden, while 95 percent of beds in emergency units are still found in public hospitals (Andersen et al. 1999).

Some important changes that have occurred in Sweden are the transfer of the responsibility for mental health care from the state to county councils in 1963 (Lindgren 1990), while in 1992 municipalities took on the responsibility of long-term health care for the elderly (“Ädelreformen”). Another reform was implemented in 1995, when municipalities were given more responsibility to serve and support people with certain long-term mental illnesses (NBHW 1999). Thus, much health care is now statistically regarded as social care. In 1995, municipalities employed 9 percent of physicians and more than one-fifth of registered nurses (NBHW 1998). Recent changes are in the direction of increased decentralization and privatization of health care.

Resources, Management, and Financing

Health care facilities available for the Swedish population have changed greatly in the last 20 years. There has been a steady increase in the number of physicians per inhabitant (from 124 per 100,000 persons in 1968 to 305 in 1995). This is partly true also for registered nurses, although in the 1990s there were approximately 1,050 registered nurses per 100,000 persons. For other personnel involved in patient treatment (e.g. psychologists, assistant nurses, auxiliary nurses, physiotherapists, etc.) there has been a reduction in the 1990s (figure 17.5). Many auxiliary nurses lost their jobs in this period (Diderichsen 1999). In 1975 there were 880 hospitals and 680 primary care centers (NBHW 1977). Twenty years later there were only 366 hospitals, but the number of primary care centers had increased to 905 (NBHW 1998).

Regulation and evaluation of health care is a central responsibility of the National Board of Health and Welfare. It regulates and controls professional health care personnel. The follow-up of the 1995 mental health care reform is an example of the evaluations performed by the NBHW (1999). Follow-ups of how communities have managed their increased obligations in recent years, due to the decentralization of health care, is likely to be a major task for NBHW in the near future.

About 73 percent of the Swedish health care system is financed by county councils' income taxes, 16 percent is from user charges, and 11 percent is financed by grants from the national government (Diderichsen 1999). The grants from the national government are meant to compensate poorer counties and counties with differential need (such as a large proportion of old people) to ensure some equality on a national level. Patient charges have increased in the 1990s, including reduced state subsidies for prescribed medical goods.

Sweden has decreased its relative spending on health services from 9.5 percent of the gross domestic product in 1981 to 7.2 percent in 1995 (NBHW 1998). Such reduction in spending on health care has not been observed in other countries, and a number of countries, such as the US, spend more than 10 percent of GDP on health care (Andersen et al. 1999). Also, considering that a substantial part of health care (for the elderly) was transferred to municipalities in 1992 (about 1% of GDP), there has been a "true" decrease in health care expenditure that began as early as the 1980s (*ibid.*; Diderichsen 1999). Some argue that we should also look at the proportion of people employed in health care in order to better estimate the relative weight of health care resources in a country (Anell and Persson 1998). Such data show that the proportion of people employed in the health care sector was stable in the years 1988 to 1993 (slightly above 10%), but fell to 8.5 percent in 1996 (NBHW 1998).

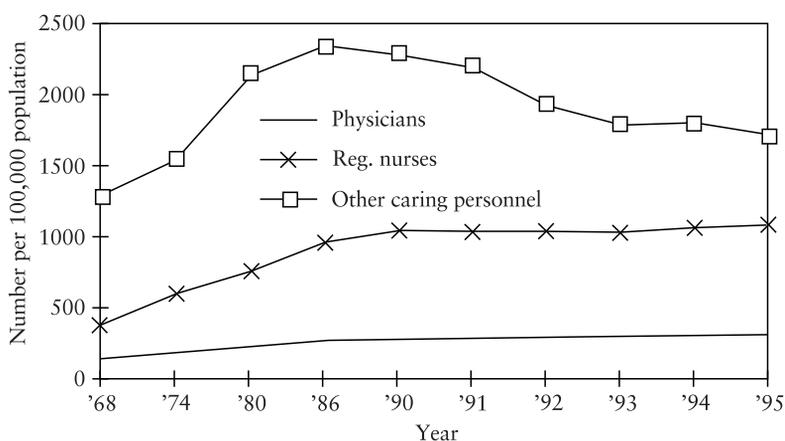


Figure 17.5 Development of the number of health care personnel with patient contacts in Sweden 1968–95

Source: National Board of Health and Welfare 1998.

Delivery of Services

It used to be that Swedish health care was heavily focused on hospital inpatient care (Diderichsen et al. 1992: 110). One indicator of this fact is that three-quarters of physicians used to be employed in inpatient care. Although a relatively large share of outpatient health care has been provided by hospitals in Sweden (i.e. Lindgren 1990), primary health care probably has had less importance in Sweden than in other comparable countries, such as in Norway or Britain.¹³ There were numerous political suggestions that primary health care ought to be extended in Sweden, but it seems that it was not until the 1980s that health care provided at primary care centers clearly increased relative to hospital care (Diderichsen et al. 1992).

Some forms of preventive care have had a special status in Sweden and are still provided free of charge. These are maternal care and care for infants and pre-school children, as well as medical and dental examinations of school children. A recent comparative analysis notes that infant mortality in the most privileged areas of London is higher than in the most unprivileged areas of Stockholm. The authors interpret this as being partly caused by preventive care at maternal and child care centers in Sweden (Kallner, Gilljam, and Sandstedt 1999).¹⁴

Effects of the Recent Health Care Transition in Sweden

The major components of the recent transition of health care in Sweden are decentralization, increased physician supply, reduction in hospital facilities, increased share of privately run health care, and increased user charges. In addition, there has been a slight decline in health care expenditure as measured by percent of GDP, as well as by percent of health care personnel in the employed population. Much of the changes are referred to as cost containment due to the economic recession in Sweden in the early 1990s (Andersen et al. 1999). Due to the relatively rapid transformations of the health care system, Sweden may be sociologically analyzed as an instance of natural experimentation. How have the working conditions changed for physicians and other health care personnel? What has happened to equal access to care? How are the growing numbers of old people affected? It seems obvious that changes have led to social and health consequences, and not only positive consequences.

The clearest instance of negative effects is working conditions within the health care sector. Many auxiliary nurses have gone on unemployment (Diderichsen 1999). Of those still employed, many have experienced deteriorating working conditions such as decreased job security (temporary job contracts) and time pressure (Ahlberg-Hultén 1999). The shortage of personnel and increased charges may also have caused social inequalities in health care use. In the mid-1990s social inequalities in health service use appear in a way not observed for at least three previous decades in Sweden (Whitehead et al. 1997). No such inequalities are present in Britain.¹⁵

There may have been negative consequences for old people (and their close relatives) as well. Charges for nursing homes and ambulatory home care have

increased, and the availability of such help has decreased as well. Usually, this means that the contribution of help from close relatives has to replace public assistance. It has been noted that informal health care, most often provided by an adult daughter or a wife (less often a husband or a son), has increased in the 1990s (Gustafsson and Szebehely 1996). It is likely that the transition of health care in Sweden affected women more than men, by increasing pressure on them as professional caregivers but also by increasing the pressure to be informal caregivers.

PRIMARY PREVENTION

Three main strategies to increase public health were distinguished by Carlsson and Arvidsson (1994): (1) juridical legislation and collective decision-making toward well-defined threats to health; (2) information about healthy and unhealthy behaviors ("health education"); and (3) general social changes or transitions. Carlsson and Arvidsson mention that collective efforts in areas 1 and 2 have characterized the history of Swedish public health policy. In legislative sources it is suggested that public health efforts should focus on diseases which (1) take life and health from the expected length of life, (2) are unequally distributed between socioeconomic groups and between men and women, and (3) are possible to prevent.

Primary prevention can be traced to efforts to reduce infant mortality as early as the eighteenth century. It was also part of investments in the water and sewage systems in the nineteenth century, and campaigns about personal hygiene in the early twentieth century (Palmlblad 1990; Sundin 1992; Qvarsell 1994). From a historical summary, it is noted that trained midwives contributed to the rapid decline in infant mortality from the early nineteenth century with "conscious campaigns for better child care" (Sundin 1992: 520).¹⁶ Qvarsell (1994) mentions that the idea of reducing poverty in order to improve health was politically debated in the first three decades of the twentieth century, indicating that social factors may have already been recognized as contributors to ill health at this time. Health issues may also have been prioritized politically. Lundberg (1998b) quoted Bäck from 1765, that poverty and misery in disadvantaged groups cause much poor health. Thus, there may have been a long tradition linking social factors to health in Sweden, as well as a belief in the possibility to change such factors in order to improve health.

Swedish alcohol policy is known to be restrictive (Carlsson and Arvidsson 1994). At present, middle- and strong-beer (>2.8% alcohol by weight), all wine, and all spirits are sold only at special shops (closed on Saturdays and Sundays). The restriction has its origin in a strong temperance movement in the early twentieth century which led to the implementation of a rationing system of alcohol in the period 1915 to 1920, and to 1955, and alcohol policy has remained restrictive (Leifman 1995). Similar alcohol policies are found in Norway, Iceland, and Finland. In recent years, restrictions on alcohol have been seriously questioned in Sweden. Harmonization with other countries of the European Union is supposed to take place in the nearest future (Leifman

1996). Whether changes in Swedish alcohol policy will lead to more alcohol-related problems is the main question in present political debates.

In an historical–sociological analysis, it was found that attempts to reduce health risks in the work environment have been relatively useless in Sweden, although in a few areas, such as chemical exposures, preventive efforts have sometimes been successful (Gustafsson 1994). Frick (1994) concludes that work environment reforms in the 1970s did not reduce occupational accidents and illnesses. It seems that it was not until the mid-1980s that work-related injuries clearly decreased in Sweden (Nationella folkhälsokommittén 1999: 23). No similar decline has been reported for work-related diseases, which in fact increased steadily in the 1980s. In 1993, discussion increased as to what should be considered a work-related disease (*ibid.*). The policy change, rather than actual change in the indicators of improved working conditions, probably caused the “statistical decline” in work-related diseases after 1993. An evaluation of changes in the work environment due to prevention efforts seems to be positive for some indicators (chemical exposures, accidents) but not for others.

In the 1970s there was a growing emphasis on prevention in the form of anti-smoking campaigns, but also on advice concerning diets and physical exercise.¹⁷ In 1992, the National Public Health Institute was introduced to help strengthen primary prevention in Sweden, focusing on areas such as alcohol and drugs, allergies, injuries, tobacco, diet, and physical exercise. An earlier Swedish study suggested that people in general are likely to respond slowly to advice given in prevention campaigns (Carlsson et al. 1979: 158–62).

DISCUSSION

In Sweden, prevention has been dominated by health information directed toward the whole population. Primary prevention ought to have partly influenced the fact that both smoking and alcohol consumption show a healthier profile in Sweden than in most other affluent countries.¹⁸ Moreover, Sweden may have a relatively healthy society with regard to the social structure. The country has a high proportion of non-manual workers and low levels of poverty and income inequality.

The Swedish health care system was transformed in the 1990s, partly because of reduced resources allocated to health care, both as measured by percent of GDP and by percent of all workers employed within health care. Still, the forefront goal in Swedish health policy is that there should be equal access to care and attempts to reduce health inequalities.

Nevertheless, socioeconomic health inequalities in Sweden have been found to be similar to neighboring countries. An evaluation of primary prevention aimed at change in individual behaviors may demonstrate why the goal of reducing health inequalities has come to a halt in Sweden (and elsewhere). It is generally known that educated and affluent people are more responsive to health information (Vågerö and Illsley 1992: 230). A relevant example is given by a multi-level heart disease intervention program in Sweden (Norsjö). Those who had high levels of education improved their health behaviors (e.g. smoking, dietary habits,

and physical exercise) more than others (Brännström et al. 1993). Therefore, an unintended consequence of health campaigns is increased relative health inequalities. People most in need of behavioral change to prevent later illness may be those who are least likely to “improve” their lifestyles (Brännström 1994).¹⁹ Thus, do we need to implement unequal prevention to reduce health inequalities (Carlsson and Arvidsson 1994)? Primary prevention aimed at the whole population may well improve the whole population’s health (in terms of life expectancy for instance), but prevention in the form of social change (such as reorganization of working conditions in a fundamental sense), is probably necessary to reduce health inequalities. This area of prevention involves more ideological and political conflicts than traditional areas of public health, and consequently is less likely to be established.

Recent changes in the health care sector probably have increased inequalities in health care use in Sweden. Whether or not such inequalities also influence inequalities in health and survival is unclear. Macintyre (1989) concluded that differences in health service use have no substantial influence on inequalities in health. As noted earlier, there were widening health inequalities in mortality among women (but not among men) between the 1980s and 1990s. The rapid transformation of the health care system is not a satisfactory explanation of the stagnation in unskilled female workers’ survival. It is more important to elucidate the fact that these women are the most frequent smokers in Sweden today and that their work environments have developed in a negative, stressful direction.

On the positive side of the social and health situation for a number of subgroups, it is my impression that especially old people have benefited from the development of social welfare.²⁰ Simultaneously however, improved material resources in this group may have gone straight to pay for increased charges for health care, medical goods, and home care facilities. It seems that there has been continued improvements in social conditions for some subgroups also during the economic recession of the 1990s, while for others, such as young adults, female manual workers, immigrants, and single parents, social changes have been in the opposite direction. It might be that those who experienced unemployment during young adulthood in the 1990s will later develop disease, but it is still too early to be certain of this. From an international perspective, social changes in the 1990s have not substantially affected the general picture that Sweden is a relatively healthy society with relatively healthy people.

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Notes

- 1 Sociology of medicine, in particular in the area of health care organization and evaluations of health care, is also an important part of Swedish medical sociology.

- 2 In a demographic study of a large number of countries, it was concluded that (referring to the increase in life expectancy) “economic advance was not a major factor in that increase” (Preston 1975: 244).
- 3 The age and sex group with best country comparability.
- 4 Countries with low proportions of non-manual workers (e.g. Ireland, Finland, Portugal, Spain) have relatively large proportions of people in agricultural classes.
- 5 Own calculations of 1990 census data, for men aged 45–59 years in 1990. Those not gainfully working were excluded, as was made by Kunst. The social class measure was the Swedish socioeconomic classification which is slightly different from the EGP scheme applied by Kunst (1997). Nevertheless, data show an increase in non-manual work carried out also after 1980, which has been described elsewhere (Szulkin and Tählin 1994).
- 6 Approximately 85 percent of men and 75 percent of women.
- 7 Lone mothers receive benefits such as housing allowance, subsidized daycare charges, and social assistance (Hobson and Takahashi 1997).
- 8 Measured by the Gini coefficient. Other measures given by Björklund do not alter this picture. The same countries tend to be in the same end of the income inequality ladder, regardless of measurement type.
- 9 In some countries membership in political associations may be due to oppression (e.g. the former Soviet Union), and in others, membership in religious associations may be due to severe conflicts between religious parties (Northern Ireland).
- 10 All these countries have above 10 liters per capita alcohol consumption.
- 11 Thus, holding advantageous social statuses is somewhat less advantageous for women than for men since women often have to sacrifice marriage and childbearing which are related to improved survival.
- 12 Own translation.
- 13 Roemer (1985) described both Norway and Britain.
- 14 A note on this may be the drop in infant mortality in Sweden in the mid-1990s which is believed to stem from the advice to lay the infant on the back.
- 15 This is perhaps particularly interesting since Britain widely is seen as a more unequal society than Sweden.
- 16 A look at figure 17.1 indicates that there was a steeper mortality decline in infant mortality that began in the first decades of the nineteenth century.
- 17 All are lifestyle factors known to be related to cardiovascular disease.
- 18 Prevention in child and maternal care centers may also have contributed to low infant mortality in Sweden.
- 19 Brännström mentions working-class men, although I would like to especially point at such men unmarried.
- 20 Data on self-reported illness in figure 17.1 also point at substantial improvements in health in ages above 65.

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