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Changing health inequalities in the Nordic countries?

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The Nordic countries, referring here to Denmark, Finland, Norway, and Sweden, have often been viewed as a group of countries with many features in common, such as geographical location, history, culture, religion, language, and economic and political structures. It has also been habitual to refer to a “Nordic model” of welfare states comprising a large public sector, active labour market policies, high costs for social welfare as well as high taxes, and a general commitment to social equality (1). Recent research suggests that much of this “Nordicness” appears to remain despite the fact that the Nordic countries have experienced quite different changes during the 1980s and 1990s (2). How this relates to changes in health inequalities is in the focus of this supplement.

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THE NEED FOR ANALYSING HEALTH INEQUALITIES IN THE NORDIC WELFARE STATES

Welfare research has mainly examined similarities among the Nordic countries. For example, economic outcomes, such as internationally low poverty levels and equal income distributions, have been emphasized. Since economic inequalities have been modest, there has been an interest in health research to investigate the size of health inequalities in the Nordic countries. Early observers pointed to Nordic countries as good examples, where health inequalities are also likely to be modest (3, 4), whereas more recent comparisons suggest that relative inequalities in morbidity and mortality by social class and education are as large as elsewhere in Europe (5). However, absolute health inequalities do not necessarily follow a similar pattern with relative inequalities (6).

In the early 1990s, the Nordic countries were hit by the international recession, but the strength and consequences varied a lot among these countries. Against this background it is justifiable to pose the following question about the development of public health in general and health inequalities in particular in the Nordic countries: What happened to health inequalities in Denmark, Finland, Norway, and Sweden over the transition from an economic boom of the late 1980s to the recession of the early 1990s?

To address the above question a joint Nordic project, *Social variations in health: Nordic comparisons and changes over time*, was set up to examine changes of socioeconomic health inequalities over time in the four Nordic countries. This is a topical task since such research has not been made before. In the first phase of the project, research teams from each participating Nordic country produced country-specific descriptions of economic and labour market changes, and analyses of changes in health inequalities from the mid-1980s to the mid-1990s. These studies, included in this supplement, are organized around a common core of analyses, although each team has been free to focus on features and trends specific to their own country.

A NORDIC INTEREST IN HEALTH INEQUALITIES

The four Nordic countries share an interest in the examination of health inequalities. This is seen in the national health policies as well as research. Health policies in each Nordic country include egalitarian targets. Previous national reports on health inequalities have been published and show clear differences in ill health and mortality between socioeconomic groups in Denmark (7), Finland (8), Norway (9), and Sweden (10). In addition to welfare state interests in policy and research, further incentives to the examination of

health inequalities are given by good data sources in the Nordic countries. There are national surveys reporting on ill health as well as mortality data using linkage with census data. One starting point for our Nordic project has been the availability of comparable nationwide population surveys.

The examination of health inequalities does not only emerge from present-day interests. In fact, there is a 250-year-old tradition of socioeconomic research on ill health and mortality in the Nordic countries. For example, Abraham Bäck, a Swedish chief medical officer, concluded in 1764 that “Many pestilences ravage among the worse-off, while few of the wealthier fall ill” (11, 12). In Finland, bishop Carl Fredrick Mennander started to study mortality among the population and its subgroups in the 1740s (13). Such early examinations of health inequalities were made possible by what is called “the world’s oldest” population statistics in Sweden (including then also Finland), and Denmark. This tradition has remained alive ever since the early examinations with a varying degree and focus of interest. In Finland, the mid-nineteenth century saw a boom of socioeconomic health research as a part of the strong nation-building project for an independent country (14).

A recent boom of research started in the early 1980s in all Nordic countries and is still continuing. This has led to some international comparisons, including the Scandinavian Welfare Survey using data from the 1970s (15, 16), comparisons of socioeconomic mortality differences in the 1970s and 1980s (17), and a comparison of health inequalities in Finland, Norway, and Sweden from the 1980s (18).

Some national studies have reported changes over time in health inequalities, i.e. whether inequalities have widened, narrowed or remained stable (7, 19–22). However, very few studies (17, 23) have compared changes over time in health inequalities between two or more countries. Such studies suggest that health inequalities persist in different countries, but contrasting trends can be found between Nordic and non-Nordic countries.

ECONOMIC CHANGES AND HEALTH

This supplement is a first step towards a joint examination of changes over time in health inequalities between the four Nordic countries. The studies included use comparable data and harmonized designs. Despite many similarities among the Nordic countries, differences can be found as well. What makes an examination of the changes of health inequalities a particularly challenging task is the differential economic and labour market development over the last few decades. While Finland and Sweden faced a serious economic recession

in the early 1990s, the economic situation in Denmark and Norway has remained much more favourable (2). Major differential trends can be seen in unemployment, which in the early 1990s in Finland jumped from 3–4% to 17%, and in Sweden from 2–3% to 8%. The unemployment level in Denmark, which was already relatively high in the early 1980s, rose again somewhat in the early 1990s, but cannot compare with the sudden and dramatic changes in Finland and Sweden. In Norway also unemployment has increased but it has remained clearly below the level found in all other Nordic countries in the mid-1990s.

Thus, the Nordic countries showed a “natural experimental” situation from the mid-1980s to the mid-1990s. The “dose” of adverse economic change, notably unemployment, received by the Finns and the Swedes was large whereas that received by the Danes and the Norwegians was moderate. What then was the bearing of this “natural experiment” on the “response”, i.e. the development of health inequalities over time in the four Nordic countries? In principle, health inequalities between different socioeconomic groups may remain stable, widen or narrow, or show polarization over time. Based on the common understanding of the social causes of illness (24) a “structural hypothesis” would predict that health and health inequalities reflect the accumulation of broader social structural inequalities in society, and are likely to change in response to the transformation of such structural inequalities (25, 26). On the other hand, it is not necessarily the case that the early 1990s’ economic recession in the Nordic welfare states would affect health *inequalities*, although it may be linked to the *levels* of poor health, particularly increasing mental ill-being, as suggested by an overview of the welfare development in Sweden in the 1990s (27). With respect to the Nordic countries in the 1980s and 1990s, it is still reasonable to ask whether the economic development and related changes in social inequalities have had any bearing on the *trends* in health inequalities.

In our Nordic project, we also wished to examine the possibility of a polarization of health inequalities between employed and non-employed people. According to the “polarization hypothesis”, health among the employed is likely to improve and show diminishing inequalities, whereas the non-employed are likely to show increasingly poor health and differ from the employed. As a result, both the employed and the non-employed groups would become more homogeneous in terms of their good and bad health respectively. It has been suggested that in Britain (28) and in Norway (22) health inequalities might have widened between the employed and the non-employed simultaneously with narrowing inequalities within the employed. One can therefore also ask whether any of

the Nordic countries would show polarization of health inequalities over time.

A trend towards polarization would reflect increasing discrimination of people with problems of health and working capacity at the labour market. On the one hand, economic recession may accentuate discrimination as competition for scarce jobs increases. On the other hand, recession and the related sudden and large increase of unemployment, such as that in Finland and Sweden in the early 1990s, is unlikely to be particularly discriminatory since a large increase in unemployment mainly takes place through collective plant shutdowns and major redundancies, instead of being individually selective. However, the “natural experimental” situation in the Nordic countries, with adverse social and economic changes varying in severity, provides an interesting case which can illuminate the “structural hypothesis” as well as the “polarization hypothesis” as potential explanations for changes in health inequalities.

NATIONAL TRENDS IN HEALTH INEQUALITIES

The four comparable country studies included in this supplement emanate from the first phase of our Nordic project which aimed to analyse, using similar data and harmonized designs, the development of health inequalities in each of the four countries separately. Because men’s and women’s social positions differ, health inequalities were analysed separately for both genders.

The studies show first that in each country only small changes in the overall prevalence of (limiting) long-standing illness and perceived health have taken place. Slight increases as well as decreases can be found, but in general the level of ill health in the Nordic countries has remained very stable from the 1980s to the mid-1990s. From the welfare perspective this suggests that the countries have performed well irrespective of the structural changes and their severity in each country.

However, important changes over time may be hidden behind the overall development and be seen only in the differential development of health inequalities between various socioeconomic groups. A main finding of the first phase of our Nordic project is that countries with the most dramatic social structural changes in the early 1990s, i.e. Finland and Sweden, show even more stable health inequalities than countries with less dramatic changes, i.e. Denmark and Norway. In fact, Finland, which was hardest hit by the economic recession, showed no widening but rather slight narrowing of health inequalities for men by their educational attainment. The health gap between the

unemployed and employed also tended to narrow, which is understandable against the changing composition of the groups. In the 1980s, when the unemployment levels were low, health-related selection is likely to have been much more common than in the 1990s, when unemployment reached rapidly high levels but was less individually selective.

Denmark and Norway, which underwent less dramatic social and economic changes in the early 1990s than the two other Nordic countries, showed general equally stable health inequalities. The Danish contribution in this supplement paid particular attention to the possibility of a health-related exclusion from the employed labour force, and found small health inequalities by social class among the employed. The authors conclude that “exclusion of persons with ill health might explain why we only observed minor health differences between the currently employed groups in Denmark in 1994”. This may be taken as a sign of polarization. Nevertheless, health inequalities by educational attainment remained as clear and consistent in Denmark as in the other three Nordic countries.

CONCLUDING REMARKS

In conclusion, structural changes have taken place in all four Nordic countries to a varying degree in the 1990s, and these are likely to have affected the everyday life of people. However, in terms of overall health and health inequalities, negligible consequences were found by the four substudies of our Nordic project. This finding may be regarded as unexpected and it is important because it suggests, at least in the short run, that health inequalities in the Nordic welfare states cannot be understood simply as deterministic consequences of structural inequalities, such as unemployment, income or other. On the hand, a broad and multifaceted understanding of the production of health inequalities is needed. This conclusion may be extended to the levels of morbidity and mortality as well. Infant mortality, for example, is usually taken as a sensitive indicator of the state of general welfare and public health. From the mid-1980s to the mid-1990s, infant mortality declined considerably in all four Nordic countries according to WHO statistics: from 7.9 to 5.1 in Denmark, from 6.3 to 4.0 in Finland, from 8.5 to 5.2 in Norway and from 6.7 to 4.0 in Sweden. Although the reasons behind this strong trend towards lower infant mortality rates may be discussed, it is worth noticing that the severe economic recession and the welfare state cut-backs that in the early 1990s characterized the Nordic countries, particularly Finland and Sweden, were not reflected in any immediate deteriorating public health performance in these countries.

In general, neither the “structural hypothesis” nor

the “polarisation hypothesis” can provide satisfactory explanations for the stable development of health inequalities in the Nordic countries. Polarization will need more attention in the future as it may only be seen over a longer period of time after the recession. With regard to the “structural hypothesis”, we can agree with Dahl and Elstad who, in their contribution, emphasize the importance of the magnitude of social and economic changes and state: “One lesson to be learned ... is that in order to affect population health and health inequalities in a detectable way, the social changes have to be rather deep and dramatic”. To put it concretely, even the Finnish or the Swedish changes, which were clearly more “deep and dramatic” than the Danish or the Norwegian ones, did not have any immediate negative bearing on health inequalities. We can further agree with Lundberg, Diderichsen, and Åberg Yngwe who, in their contribution, call for a broader examination of the social determinants of health inequalities instead of an exclusive structural explanation only: “The fact that the size and patterns of health inequalities have remained unchanged during a period when income inequalities have increased ... is not really compatible with theories on the importance of income distribution for health inequalities” (26). At least the Swedish case shows that such a relationship is not independent from other structural factors, like welfare state arrangements.

What then is the potential importance of the “welfare state arrangements” as exemplified by the “Nordic Model” of welfare state? It would be worth assessing to what extent the Nordic welfare states, particularly Finland and Sweden, have been able to buffer against the adverse effects of the early 1990s’ economic recession. However, such an assessment falls outside the scope of this project. We can only refer to a recent analysis, which shows that the welfare state institutions, economic and political measures, and welfare outcomes in the Nordic countries remained surprisingly stable across a number of indicators from the 1980s to the 1990s (1, 29), and agree with the authors of that analysis that “all traditional hallmarks of the Nordic model appeared to be very much alive” (30). From the broader welfare perspective the performance of the four Nordic countries in terms of the stable health inequalities over a period of “deep and dramatic” social and economic changes is therefore compatible with the evidence from other areas of welfare which also have been able to resist the adverse social economic development.

Finally, account must be taken of the possibility that the situation may change over the post-recession time from the mid-1990s on. People who were unemployed during the heyday of the recession are likely to face major difficulties in re-employment. In Finland and

Sweden, unemployment has declined only slowly from the peak levels, and in Finland it still continues to be relatively high. The long-term unemployed particularly face difficulties in finding new jobs, and health is likely to play a role here as well. Also, working life has been affected by the recession as the pace of work may have intensified. There are signs that this will give rise to new health inequalities among employees as suggested by evidence from a Finnish study (31). In Sweden, sickness absence has increased dramatically since in the late-1990s, especially among women (32). Thus, there is a need to continue to follow-up the changes in health inequalities as well as deepen our cross-country comparisons.

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Publishing the substudies included in this supplement concludes the first phase of the Nordic project on *Social variations in health: Nordic comparisons and changes over time* (33). A second phase has followed with the aim of comparing systematically changes of health inequalities by using a combined and harmonized joint Nordic data bank (34).

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