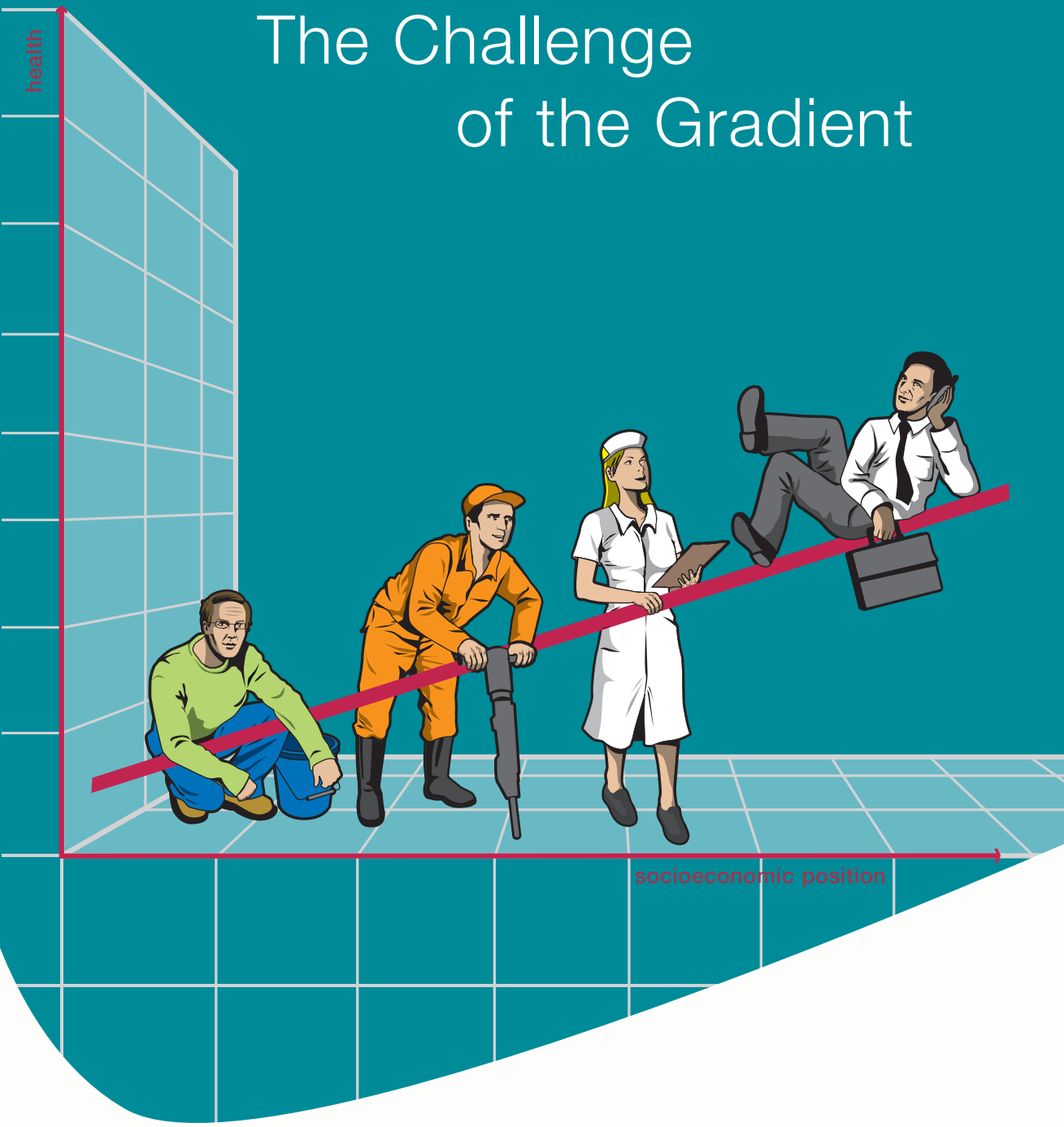
The Norwegian Directorate for Health and Social Affairs' Plan of Action to Reduce Social Inequalities in Health

The Challenge of the Gradient



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Plan of Action to Reduce Social Inequalities in Health

The Challenge of the Gradient

Preface

«*It's better to be rich and healthy than poor and sick*». Few are perhaps aware of the seriousness and reality behind this old joke. Rich people are actually healthier than poor people. Research shows unequivocally that people from the higher socioeconomic strata, measured in terms of education, occupation or income, live longer and healthier than people from less advantaged levels of society.

When illustrated graphically, social inequalities in health form a gradient throughout the population. Not only do the poorest people have the poorest health. The richest people are slightly healthier than the second richest people, who are in turn slightly healthier than the third richest, etc. Social inequalities in health are therefore a matter of concern for all of us. In other words, social inequalities in health constitute a «gradient challenge» that requires broad perspective on the problem in all parts of the population.

Social inequalities in health do not only constitute a public health challenge. As a recent white paper on Norwegian public health policy puts it, it is also a «*problem of fairness when people with a low social status, few assets and few resources also suffer from most pain, illness, disability and reduced life expectancy*».

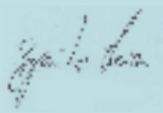
The Directorate for Health and Social Affairs was therefore assigned the task of drawing up a plan of action to reduce social inequalities in health. With this Plan, the Directorate wishes to:

- increase our knowledge of social inequalities in health and
- develop measures to reduce social inequalities in health.

If preventive efforts and measures in all sectors are re-oriented, social inequalities in health can be reduced. This Plan of Action constitutes the first phase in the effort announced by the Government in the White paper on public health policy. In the next phase, a cross-sectoral strategy to reduce social inequalities in health will be formulated and based in the Ministry of Health and Care Services.

Inequalities in health are unacceptable when they are unfair, avoidable and unnecessary. The Directorate for Health and Social Affairs is committed to maintaining a constant focus on inequalities in health that follow social patterns.

The Directorate for Health and Social Affairs, May 2005



Bjørn-Inge Larsen
Director General

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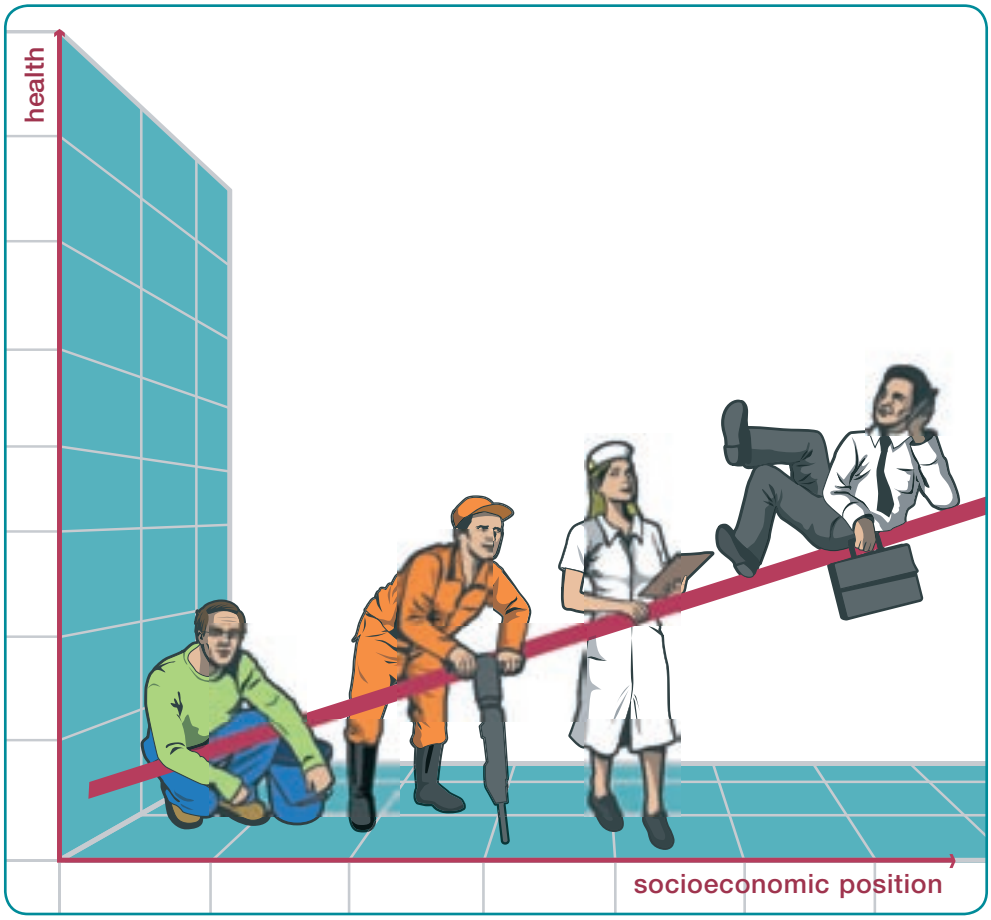


The Challenge of the Gradient
Social inequalities in health fom a gradient throughout the population. This «challenge of the gradient» requires a broad, population-based focus on the problem.

1 Introduction

1.1 Background

In Norway, as in most other countries, the correlation between people's socioeconomic position and their state of health is significant and well established. Research has shown that:[1]

- social inequalities in health can be documented for most age-groups
- there are significant social inequalities in health among both men and women
- social inequalities in health are significant regardless of whether social position is measured in terms of education, occupation or income
- social inequalities in health form a gradient: the higher your socioeconomic status, the better your health
- social inequalities in health are durable and have apparently not changed very much over time
- social inequalities in health are not significantly less in Norway than in other European countries

In *Report No. 16 (2002–2003)* to the Storting: *Prescription for a Healthier Norway* (a White paper on public health), the Government therefore announced:

> *«… a long term effort on several fronts to reduce the inequalities. There must be more focus on inequalities in health when measures are planned, including measures that aim to change life-styles. A special plan of action will be drawn up to reduce social inequalities in health.»*

According to the White paper, it should be «*an obligation for a democratic country to try to influence the conditions that create social inequalities in health.*»

The Government stated that efforts to reduce social inequalities in health must be long-term, and that focus on this issue must be maintained over a long period of time. Three main elements were identified:

- stronger focus on monitoring health
- strengthening research in this area
- developing competence in the health administration

Responsibility for the first two elements was assigned to the Norwegian Institute of Public Health and the Research Council of Norway respectively, with contributions from the Directorate for Health and Social Affairs. The Directorate was also given the main responsibility for the third element.

Efforts to reduce social inequalities in health have long been on the agenda of the World Health Organisation (WHO). In WHO Europe's Health for All targets, which were adopted in 1998, the following goals were set for efforts to tackle social inequalities in health:

> *«By the year 2020 the health gap between socioeconomic groups within countries should be reduced by at least one fourth in all Member States, by substantially improving the health of disadvantaged groups.»*

WHO has recently decided to establish a global commission to pave the way for a global political process to reduce social inequalities in health, among other things by obtaining an overview of current knowledge of the social determinants that affect health and by developing a list of strategies and measures that may reduce inequalities in health.

1.2 What do we mean by social inequalities in health?

Researchers working in this field use a number of different health indicators to measure social inequalities in health, such as life expectancy, mortality, the incidence of various diseases and self-perceived health. They also use a number of less direct health indicators, such as national insurance benefits and lifestyle-related risk factors.

«Social inequalities in health» may be defined as systematic differences in the population's state of health that correlate with social and economic categories, in particular occupation, education and income. Social inequalities in health may therefore be understood as *socioeconomic* differences in health. In this Plan of Action, terms such as «social strata» or «classes» mean socioeconomic groups defined according to occupation, education or income, or a combination of the three.

Health surveys based on gender, geography, ethnicity, family status, etc. also show marked differences in health. Such categories may be regarded as independent from – but illuminating for our understanding of – socioeconomic inequalities. To the extent that they help us understand social inequalities in health, this Plan of Action also takes these other perspectives into account.

Other factors are also relevant in this context. For example, people with immigrant backgrounds are more often unemployed and have less financial resources than ethnic Norwegians. Furthermore, disadvantaged social groups consist, on average, of an older population. And they are often disabled. Measures of social inequalities in health, such as education, income or occupation, often correlate with other variables, such as place of residence. Such information can be used to channel measures to the areas where they will have the greatest impact.

Working to reduce social inequalities in health means making efforts to ensure that all social groups can achieve the same life expectancy and be equally healthy. Differences in health not only affect specific occupational groups or the poorest people or those with least education. On the contrary, research indicates that we will not address the relation between socioeconomic position and health if we base our activities on strategies that focus on «the poor» as an isolated target group. It does not appear to be the case that only people under a certain threshold of absolute poverty are less healthy due to their low social status. On the contrary, studies indicate that there is a «continuous increase in health afflictions with declining socioeconomic status throughout the population»[2]. Differences in health are also apparent between the richest and the second richest people – even when figures are adjusted for known risk factors. This may indicate that social inequalities and social divisions *themselves* cause illness. Relative poverty may therefore be an important health determinant that affects us all.

1.3 The Directorate for Health and Social Affairs' Plan of Action

In Proposition No. 1 (2003–2004) from the Ministry of Health to parliament (the national budget), the Directorate for Health and Social Affairs was assigned the task of establishing a centre of competence on social inequalities in health. The White Paper on Public Health points out that important responsibilities of this Competence Centre will be to:

- facilitate cooperation between and coordinate the work of Norwegian experts and institutions working in this field
- systematically collect experiences from international organisations and other countries.
- establish a knowledge base
- develop expertise that can provide a basis for advice to central and local authorities

This Plan of Action is intended to provide the foundation for the Directorate for Health and Social Affairs' work on social inequalities in health and will constitute the work schedule of the Competence Centre for the next two years. One of the characteristics of the field of public health is that the majority of the determinants of health are to be found in areas outside the health sector. For example, the health services deal with the victims of traffic accidents, but the greatest possibilities for preventing such accidents are situated in the transport sector. This means that national strategies aimed at reducing social inequalities in health must be anchored in all sectors of society. This Plan of Action will therefore be the first stage of an effort to prepare the ground for a national, cross-sectoral strategy to reduce social inequalities in health.

One starting point for efforts to reduce social inequalities in health is to recognise that a great deal of work remains to be done in this field. We know something about the incidence of social inequalities in health, but we have a long way to go before we can establish a clear picture of the causes. If we base our work on international experience, our knowledge increases, but it is neither simple nor always well justified to transfer international experience to Norwegian conditions. Consequently, the majority of the measures proposed by the Directorate for Health and Social Affairs in this Plan of Action are aimed at improving the knowledge on which further action in this field will be based. Also, the Directorate will work to adjust its own strategies so that they take social inequalities in health into account, and prepare a national, cross-sectoral strategy for this field. Thus, the goals of the Plan of Action to Reduce Social Inequalities in Health for 2004 and 2005 are as follows:

- Increase our knowledge of social inequalities in health by:
  - strengthening expertise at different levels
  - strengthening research and documentation
- Develop measures to reduce social inequalities in health by:
  - developing impact assessments as a tool to highlight the impact of a policy, strategy, programme or project on social inequalities in health
  - ensuring that that the Directorate's own policies take social inequalities in health into account
  - preparing a professional basis for a national strategy that will involve all sectors

2 What do we know today?

2.1 Current situation and trends of development

There is comprehensive documentation of significant social inequalities in health in Norway. This is the case whether we use education, income or occupation to measure social status, and the differences in health are clear in relation to most relevant health indicators.

For many years, it was generally believed that since Norway has been a relatively egalitarian society since World War II, there would also be less socioeconomic differences in health here than in other countries. This may be true in terms of absolute differences in health. Universal welfare measures have helped to increase life expectancy and reduce morbidity in all social strata. However, Johan P. Mackenbach et. al. have found that the differences in both self-reported health and mortality, measured on a relative scale, are greater in Norway (and Sweden) than the average for Western Europe.[3] Other comparative studies, such as those covering the OECD, Western Europe and the Nordic region, show that there are significant social inequalities in health in Norway, and the same results are found in various Norwegian studies.

2.1.Mortality

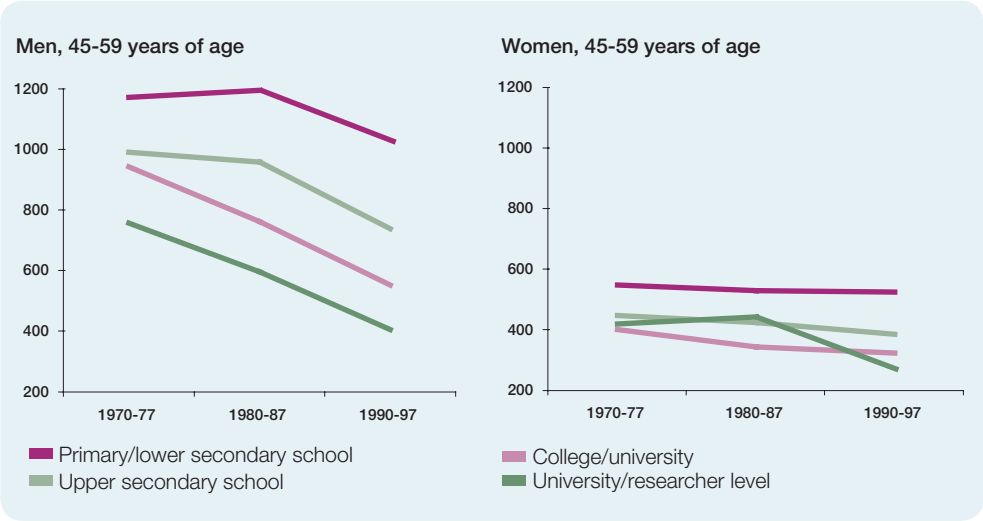


Figure 1:
Mortality by education. Adjusted for age, deaths per 100,000.

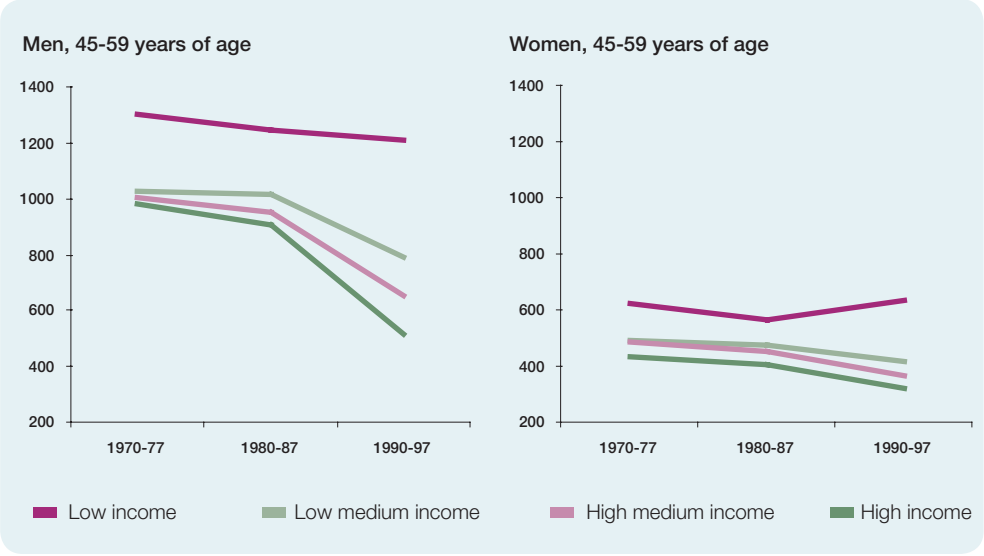
A report from the Norwegian Institute of Public Health published in November 2003 shows the current status and trends of development for social inequalities in health in Norway.[4] The survey was based on data from the National Causes of Death Register. As shown in figure 1, mortality declined sharply and consistently with rising levels of education in all three periods. In all educational groups, mortality also declined over time (except for women with education at university/researcher level in the 1970s and 1980s). There is therefore a clear social gradient in mortality that is somewhat more pronounced for men than for women. The data also show that social inequalities in health increased from the 1970–77 period to the 1990–97 period.

There was likewise a clear decline in mortality in step with rising income (figure 2). The greatest change occurred between the lowest and second lowest income categories. In the lowest income category there was only a slight decline in mortality between the two last periods for men, while there was even a marked increase for women. In the other income groups, there was a clear decline in mortality between the last two periods. This indicates a significant rise in social inequalities in health for both genders, but mostly for men.

Another analysis of the connection between parents' social status and infant mortality showed that although infant mortality declined in the period 1967–1998, social differences remained.[5]

If we look at diseases such as cardio-vascular diseases and many types of cancer, we find marked social differences in foreign studies.[6] Social differences in blood pressure,

cholesterol and, not least, mortality follow the same pattern in Norway.[7] This pattern can also be seen in the prognosis for different patients: persons with education at Master's degree level can expect to live roughly eighteen months longer after a cancer diagnosis than persons with education at primary and lower secondary level, even when factors such as the tumor stage at the time of diagnosis, the type of cancer and age differences are taken into account.[8]



Figur 2:
Mortality by income. Adjusted for age, deaths per 100,000.

2.1.2 Child and youth health

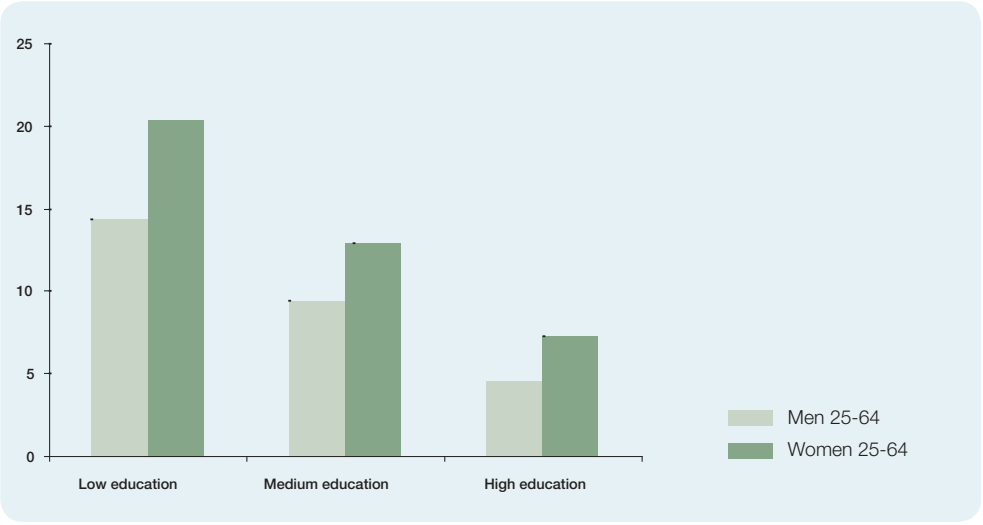
Several Scandinavian studies have shown that child and youth health is unevenly distributed by social status. [9, 10, 11 and 12] One such study from 1996 found that working class parents with low education and low income had approximately 1.7 times higher odds of having a child with a chronic disease than parents in the highest social groups.[9] The study also showed that children of parents in the more advantaged social groups consulted a medical specialist more frequently than children of parents in less advantaged groups. But a higher proportion of parents in the lowest social classes thought it was important for the doctor to be a specialist when they contacted the health service due to a child's illness. Differences in the use of specialist health services was also greater among children with chronic diseases than among children without chronic diseases.[10]

A summary of current knowledge carried out for the Swedish National Institute of Public

Health in 2002 showed that physical health problems were, on average, 60% more common among children of parents with low social status than among children of parents with high social status.[13] Similar results were found for mental problems (70% more common on average) and the occurrence of risk factors for poor health (80% more common on average).

2.1.3 Chronic afflictions

Social inequalities in health are not only apparent in the «hard endpoints», such as mortality and life expectancy. Data from a large medical survey in the mid-Norwegian county Nord-Trøndelag (HUNT) indicate that the risk of being put on a disability pension is three times greater for unskilled male workers than for men in the «senior position, independent academic occupation» category.[14]



Figur 3:
Symptoms of depression and anxiety (HSCL>1.75) by level of education.

The trends are equally clear if we look at the most common diagnoses behind disability pensions, that is, muscular-skeletal complaints and mental complaints. The social differences are evident in the case of muscular-skeletal complaints. A survey carried out by the Swedish Confederation of Trade Unions showed that 29% of workers in the 45–64 age-group reported these kinds of complaints, compared with 13 % of higher civil servants.[15]

Norwegian data show that social status and mental complaints are correlated.[16] Figure 3 shows a clear correlation between level of education and symptoms of depression and anxiety, based on the Hopkins Symptom Check List (HSCL). We see the same tendencies in self-

perceived health. Data from the Health Survey in Nord-Trøndelag County for 1995–97 (HUNT 2) show that while 26.9% of men with primary and lower secondary education consider themselves to be in poor health, the corresponding percentage for men with college and university education is 13.4.[17] The figures for women are 30.3% and 17.7%, respectively.

2.2 Causes

Knowledge of the causes of social inequalities in health is still deficient, both in Norway and internationally. Nevertheless, we have research results that can help us understand some of the causal relations.

Factors that cause illness, injury and death will exacerbate social inequalities in health when such factors are socially patterned. Whether we can say that a certain factor affects the social distribution of health problems is dependent on the degree to which the factor is unevenly distributed. High alcohol consumption is related to health problems, and a reduction in the nation's total alcohol consumption will affect the health of the population. If the social differences in alcohol consumption are small, however, an overall reduction in alcohol consumption will have little effect on social inequalities in health. The challenges for efforts to reduce social inequalities in health are therefore not necessarily the same as general public health challenges, and the most important causal factors may be different for these two fields.

We have ample documentation that shows that there are social differences in lifestyle, cf. Section 2.2.4. This is important for considerations about the relative weight of individual and social explanations of social inequalities in health. It is obvious that individual choice affects our health. However, it is also clear that if cigarette smoking, for instance, was caused solely by individual choices, we would expect to find smokers randomly distributed in the population, in the same way as, say, red or blue cars. Since smoking is so closely connected to socioeconomic position, we must ask ourselves what it is in the social environment that makes certain groups more disposed for cigarette smoking. The same question may be posed in relation to all behaviour that follows social patterns. To the extent that the distribution follows a social gradient, we can assume that individual choice is partly a result of, and not only a cause of, a person's place in the social hierarchy. Although individuals are partly responsible for their own health, the health of the population is, not least, the result of development trends and political choices beyond their control. Some of the causes of social inequalities in health are therefore to be found in social conditions. Political decisions that create and maintain social differences may thus contribute towards creating and maintaining social inequalities in health.

Scholarly literature discusses many different explanations of why social inequalities in health occur. Some researchers place emphasis on mechanisms such as lifestyle and health-related behaviour, while others place emphasis on more fundamental social and/or psychosocial factors. However, most seem to agree that causes must ultimately be sought in the complex interaction of different factors and that no single explanation is sufficient on its own. The following sections describe some of the most common explanations of social

differences in health that are found in the literature, categorised as follows:[18]

- early life and the life course
- psychosocial factors
- materialist explanations
- Behavioural explanations
- the health service
- selection

2.2.1 Early life and the life course

Many researchers who focus on the significance of the life course stress the importance of early life, from the time of conception until well into the childhood years. Some research indicate that the foundation for good health in adulthood is laid in the first years of life and before birth.[19] This finding is not new. Stein et al have shown, among other things, that malnutrition in embryos during the period of famine in the Netherlands in 1944 influenced mental health in adulthood.[20] Forsdahl's studies here in Norway [21] and Barker's research group in the UK [22] found clear connections between birth weight and coronary heart disease, diabetes mellitus and hypertension in later life. According to this «life course model», adult diseases are results of accumulated biological and social influences throughout life.[23]

Social inequalities in health are clearly linked to social variations in childhood living conditions.[24] Surveys show lasting traces of childhood strains, stresses and exposures in the health status of adults, the middle-aged and the elderly[25]. This may apply also to many lifestyle factors. A person who starts smoking at an early age is more likely to smoke later on in life.

The importance of childhood living conditions for social inequalities in health is an area in which we need more knowledge.

2.2.2 Psychosocial factors

Different social groups are exposed to different degrees to experiences and life situations that are perceived as threatening, frightening and difficult to deal with. This partly explains the long-term pattern of social inequalities in health. Mental stress may trigger direct mental problems, and detrimental, long-term mental stress may also be part of the causal complex behind many somatic illnesses. A person's position in society will be a contributory factor to how that person manages to deal with a difficult situation.[26] Other background factors, such as ethnicity, gender and disability may have exacerbatory effects. However, there are also other, more indirect ways of explaining how psychosocial stress may lead to social inequalities in health.

Firstly, there is an on-going international debate on what is often called Wilkinson's «income inequality and social cohesion» model. The model states that, in rich societies, the size of differences in income is more important from a health point of view than the size of

the average income.[27] Wilkinson's hypothesis is that the greater the income disparities are in a society, the greater becomes the distance between the social strata. Social interaction is thus characterised by less solidarity and community spirit. The people who lose most are those at the bottom of the income hierarchy, who are particularly affected by psychosocial stress linked to social exclusion, lack of self-respect and more or less concealed contempt from the people around them.

Secondly, there are significant social differences in the occurrence of short-term and long-term episodes of mental stress, linked to uncertainty about the financial situation, the labour market and social relations. The same applies to the probability of experiencing violence or threats of violence. Disadvantaged people have experienced far more insecurity, uncertainty and stressful events in their life course, and this affects social inequalities in health. This is illustrated in the following table.[28]

	SOCIAL STATUS:[1]	
PERCENTAGES WHO HAVE EXPERIENCED IN THEIR ADULT LIFE:	LOW:	HIGH:
– several episodes of 3+ months of unemployment	11%	1%
– lost their job several times (involuntarily)	7%	2%
– received social security benefits	11%	2%
– had a serious accident	21%	6%
– been unemployed at the age of 55	29%	7%
– been unmarried/had no cohabitant at the age of 55	26%	14%
– had a low income at the age of 53	20%	2%

[1]Low status = the third with the lowest occupational prestige, high status = the third with the highest occupational prestige.

The effect of membership in a nuclear family on differences in health is discussed in a report from the Norwegian Institute of Public Health.[4]

2.2.3 Materialist explanations

By «material living standards» we understand our physical and environmental surroundings, such as housing (relating to both the house itself and its location), our consumption potential, i.e. the financial means to buy healthy food, warm clothing, etc. and our physical working environment.

Social differences in material living standards were probably more important in the past. Poverty, i.e. material deficiencies that directly weaken the organism and reduce its potential for health, was widespread before World War II and may have influenced the health of the pre-war generation. Today, the material standards of living are probably

directly significant for the health status of marginalized groups, and also for the lower social strata, especially if we include environmental factors.

Despite increasing legal requirements on the working environment, significant strains stemming from people's working environment remain. There are clear social differences in physical, mental, chemical and ergonomic strains in the workplace. Surveys of living conditions carried out in the 1990s showed clear differences in working environment strains experienced by blue-collar and white-collar workers.

The accumulation of negative environmental factors throughout working life probably has a significant effect on variations in the general health of the population, especially when people are exposed to such factors over a long period of time. Muscular-skeletal complaints are typical afflictions. A recent Norwegian study of men's health problems shows that the physical environment in which they worked was an important factor in explaining variations in the health problems of fifty-year-olds.[29]

2.2.4 Behavioural explanations

Social inequalities in health are associated with social differences in lifestyle. Such differences are found in nutrition, physical activity, tobacco consumption and alcohol consumption. This indicates that differences in lifestyle partially explain social inequalities in health, but researchers do not agree on their importance: some believe differences in lifestyle are decisive, others regard them as contributory factors that in turn result from more fundamental causes. Differences in lifestyle are perhaps more important for social differences in mortality from, e.g., cardio-vascular diseases and cancer than for social differences in morbidity from chronic diseases. The latter are perhaps not as life-threatening as the former, but they nevertheless cause a great deal of sickness absence, disability pensions and reduced quality of life.

Lifestyle factors are relatively accessible for research, so this is one of the causal areas we know a good deal about. Although descriptions of the correlation of lifestyle factors with social status are relatively detailed and well-founded, this should not be taken to indicate that these factors are the most important causes of social inequalities in health. There may be other, more fundamental factors that cause variations in both lifestyle and health. Some surveys indicate that differences in lifestyle can only explain a small proportion of social inequalities in health.[30] The following description of social differences in relation to a number of lifestyle factors should take this into account.

Tobacco:

Smoking behaviour in Norway is socially patterned. The incidence of daily cigarette smoking is more than twice as high among people with only primary and lower secondary education as among people with university/college education.[31] Fewest smokers are found in technical/scientific occupations while the highest fraction of smokers are found among industry and transport sector employees and among people outside the labour force. Smokers in the lower

social strata smoke more intensely than smokers in higher social strata, and they are more likely to use the most hazardous tobacco products. They also start smoking at an earlier average age, accept passive smoking to a greater extent, are less likely to have smoking restrictions in their homes and are more frequently inadequately informed about various tobacco products' effects on health. There is also a clear social gradient in smoking cessation.[32]

Nutrition:

Surveys carried out in Norway[33, 34, 35, 36 and 37] and many other industrialised countries[38, 39, 40, 41, and 42] show that people from the lower social strata have a less healthy diet than people from higher social strata. In certain immigrant groups, there is an excess of overweight, diabetes, poor dental health and vitamin D and iron deficiency. It is commonly found that people with long education have a higher intake of fruit and vegetables and a slightly lower proportion of fat in their diet. It has also been shown that children of parents with higher education have a healthier diet, eat more regularly and appear to have a better body image than children of parents with a short education.[43 and 44] The connection between social status and dietary factors probably change over time and are dependent on culture. In China, fat intake is increasing most rapidly in urban areas, and the people in advantaged socioeconomic positions have the least healthy habits in terms of diet, activity, smoking and alcohol consumption.[45] In Norway, a low-fat diet was associated with the socially disadvantaged in the 1930s[46] and with the more advantaged in more recent years.[47] In the past thirty years, the majority of the population have changed to a lower fat diet. However, there are many indications that the higher social strata are ahead in the move towards a healthier diet. In Finland, researchers found that both people with a short education and people with a long education changed their choice of food products in a healthier direction, so that social inequalities in health were reduced in the period 1979–90.[48] The Finnish surveys and Norwegian market surveys[49] indicate that the disadvantaged social groups follow the same trends that are seen in the advantaged groups, but after a certain time-lag.

Physical activity:

There are marked social differences in levels of physical activity. According to a recent report from Statistics Norway, more than 26% of people with only primary and lower secondary education state that they never exercise, compared with 7% of those with higher academic education. 41% of those with only primary and lower secondary education exercise at least twice a week, compared with 62% of people with higher academic education.[50]

The incidence of overweight and obesity is increasing in Norway. One important explanation is that the population's general level of activity has declined. Both average weight and the proportion of women and men in the 40–42 age-group who are overweight increased between the early 1960s and 1999. On average, men's weight has increased by

9.1 kg, while women's weight has increased by 3.7 kg. In Oslo, there are clear differences between the eastern and western parts of the city in terms of both average body weight and the percentage of overweight people.[51]

Alcohol consumption:

Alcohol consumption increases by education and income.[52] This trend is apparent both in terms of drinking frequency and total consumption. The 1998 national survey of health and living conditions showed that a larger proportion of people with long education «drink [alcohol] frequently» than people with low levels of education. However, this picture must be supplemented with the fact that we also find a J-shaped correlation between income and alcohol consumption for men, but not for women. In other words, men with the lowest income drink more than men with medium income, and men with the highest income drink the most. This may be connected to the fact that men in the lowest fourth of the income scale are more socially marginalized, wich might result in an increased alcohol consumption.

2.2.5 The health service

Throughout the post-war period, there has been a broad consensus in Norway that the access to health services should be based on the principle of equity, regardless of place of residence, gender, financial situation, social status, etc. In general, there appear to be only limited social differences in the use of health services, although there are exceptions.[53] However, it is not clear whether the relation between access to and demand for health services in the lower social strata is in accordance with the observed social inequalities in health, and whether the quality of the health services provided is equitably distributed between the social strata.

The supply of treatment for some diagnoses does not vary very much between different social groups. However, this is not true for all diagnoses and ailments. Health services work more satisfactorily for acute conditions than for chronic conditions and disabilities. This may be regarded as an instance of «the inverse care law»: the availability of good medical care tends to vary inversely with the need of the population served.[54] This has consequences, not least, for people with serious mental illnesses. The Norwegian Board of Health's Annual Supervision Report for 2003 stated, «Compared to other service recipients, people with mental illnesses received far from adequate help in the areas that has been examined».

Some people have claimed that the health service should play a more active role in helping to reduce social inequalities in health.[55] A number of low-threshold schemes, such as health clinics for young people, may be viewed in this perspective.

Researchers have pointed out that several recent reforms may lead to an increase in social differences in the use of health services.[56] This applies, among other things, to the rise in the fees paid by patients for health services and drugs; arrangements for purchasing health services for people on sick leave, the spread of private health services with high user fees,

adaptations to the market in the hospital sector and the growth of private health insurance.

In some areas, social differences in the use of health services are patent, such as in the field of dental health. Dental health services for persons over the age of 18 are in Norway paid by the patient. This is probably one of the main reasons for the clear social gradient in the use of dental health services.[57 and 58] Another example comes from the debate on public financing of various cancer screening schemes, including those for breast cancer and cervical cancer. It is highly probable that increased user fees will create greater social differences in the use of such schemes.

2.2.6 Selection

People pursue different life courses and careers. They follow different educational paths and have different jobs, and they move in different ways through the social structures. This mobility might contribute to the social gradient in health. This is known as the «selection explanation», which maintains that people in good health have a tendency to rise through the social hierarchy because they start out with the health resources necessary to complete the most demanding educations, get the best jobs and reach the highest income categories. People with weaker health resources, allegedly, have a tendency to end up or remain low on the social ladder.

The status of research on selection processes and health-related mobility within the socioeconomic structure can be summarised in three points:

- Variations in health in youth have some significance for educational paths and for the kind of job a person has at the beginning of his or her working career
- For those who are already established in working life, variations in health have little significance for the overall progress of a person's career
- People who develop serious health problems in adult life are often excluded from working life, and often long before the ordinary retirement age

One might think selection processes to be inevitable. But they are in part due to discriminatory practices, in part also to failures to adapt educational institutions and working life to special needs. To the extent that this is the case, social selection is neither necessary, inevitable nor fair.[59] This particularly affects persons with disabilities, persons from immigrant backgrounds and, to a certain extent, women.

2.3 Effective measures

There are different approaches to finding measures to reduce social differences in health. The fact that we have a continuous increase in health problems in step with declining socioeconomic status throughout the population has consequences for the way measures should be designed. It will not be sufficient to base efforts on a high-risk strategy that only meets the needs of the very poorest people. If we wish to improve public health and ensure

that health is equitably distributed, this requires broad-based, population-oriented strategies. General measures to reduce social differences will probably contribute towards reducing health differences.

Programmes of action implemented in other countries and by international agencies usually include both general measures targeting the entire population and special measures targeting specific groups defined on the basis of socioeconomic criteria or other criteria that are correlated with socioeconomic criteria, such as geography. Examples include:

- measures that promote social equalisation, such as changes in housing policy and tax policy
- general public health measures that benefit the entire population, such as free fruit for all schoolchildren
- special measures that help to ensure that general measures also reach disadvantaged groups, such as the re-orientation of smoking cessation programmes to target specific groups
- measures that directly target specific social groups, such as the development of low-threshold health services in areas with a high percentage of inhabitants with poor social resources

A comprehensive European review of strategies and measures in different countries, carried out in 2002 by a research group under the direction of Johan P. Mackenbach and Martijntje Bakker, concludes that the knowledge base as regards effective measures to reduce social differences in health is weak[60]. However, the review also points out that knowledge of social inequalities in health has reached the point where we can identify entry points to policy and interventions, and that research in the years ahead should put greater emphasis on evaluating different types of measure.

The review points to several key angles of approach, which are briefly summarised below:

a) Health impact assessments. It is important to focus on how decisions taken at various levels have consequences for social differences in health
b) Social policies. It is important to initiate measures that reduce poverty and unemployment, and measures that improve the social situation, such as in the housing market
c) Environmental measures. It is important to reduce adverse physical and psychosocial factors in the working environment and other surroundings, in terms of both direct health consequences and exclusion from working life
d) Lifestyle measures. It is important to reduce the social differences in the use of tobacco and intoxicants, physical activity and diet
e) Measures targeting children and adolescents. It is important to counteract factors that have a negative impact on the health and well-being of children and adolescents, and that limit their opportunities later in life
f) Measures within the health service. It is important to ensure equal access to health services
g) Interaction between various levels of public administration. It is important that national and local policies are developed in concert

In principal, none of these types of measures are irrelevant in a Norwegian context, and the Government mentions several of them in their 2003 White Paper on Public Health. However, some of the measures are very long-term in nature and require broad political consensus, and several necessitate the use of instruments that lie outside the scope of the health sector. International research literature, however, underscores the importance of «comprehensive packages» of measures: in view of the complexity and extent of social health differences, countermeasures should be broad-based and inclusive rather than narrow and exclusive. Any plan of action to tackle social inequalities in health should therefore aim at incorporating all of the spheres of measures covered in the above list. However, not all of them are equally feasible.

The most effective sphere of measures is perhaps social equalisation policies, but these are also the measures that are most difficult to carry out in practice. According to Mackenbach and Bakker, these types of interventions address the chain of causes that leads to social inequalities in health at a fundamental level. Reorganising the health service is considerably more feasible, both in practical terms and politically, but probably also less effective because it does not affect the chain of causes at as deep a level. In between these types of measures, there are, for example, interventions that target working and living environments and lifestyles. The instruments employed by the Directorate for Health and Social Affairs will largely be in this middle range. Nevertheless, it is important for future efforts to tackle social inequalities in health not to forget the other areas of interventions, social policies in particular.

3 Goals and main strategies

3.1 The goal of this Plan of Action

This plan of action is the starting point of the Directorate for Health and Social Affairs' further efforts to tackle social inequalities in health. In an initial phase, we consider it particularly important to facilitate the cooperation of national experts in this field, and to disseminate knowledge concerning the challenges related to social inequalities in health. As an extension of this objective, the plan of action seeks to prepare the ground for a future national, cross-sectoral strategy.

The following objectives form the basis for the Directorate's efforts to reduce social inequalities in health:

- Increase our knowledge of social inequalities in health by:
  - strengthening expertise at different levels
  - strengthening research and documentation

- Develop measures to reduce social inequalities in health by:
  - developing impact assessments as a tool to highlight the impact of a policy, strategy, programme or project on social inequalities in health
  - ensuring that the Directorate's own policies take social inequalities in health into account
  - preparing a professional basis for a national strategy that will involve all sectors.

3.2 Increasing our knowledge of social inequalities in health

The White Paper on Public Health outlines a tripartite approach to the tasks involved in reducing social inequalities in health. Firstly, emphasis on health monitoring will be increased in order to track trends in social inequalities in health; secondly, research in this field will be strengthened; thirdly, expertise on social health inequalities will be built up in public administration.

The main players involved in these efforts are the National Institute of Public Health, the Research Council of Norway, the Directorate for Health and Social Affairs, and the Norwegian Health Services Research Centre. Responsibility for health monitoring has primarily been assigned to the National Institute of Public Health, while the Research Council administers relevant research programmes. One of the most important tasks, with which the Directorate for Health and Social Affairs has been charged, is to build up a competence centre on social inequalities in health within the public administration. The Norwegian Health Services Research Centre provides support in assessing the effects of measures.

According to the White Paper on Public Health, the Directorate is also to contribute to the work of the National Institute of Public Health and the Research Council of Norway, while these institutions also will provide assistance in the Directorate's sphere of activity. The different players must therefore cooperate closely on formulating their strategies in this field.

3.2.1 Strengthening expertise at different levels

A Competence Centre in the Directorate for Health and Social Affairs

Under Proposition No. 1 (2003–04) to the Storting (the National Budget), NOK 2 million was allocated to the Ministry of Health for the establishment and operation of the Competence Centre in the Directorate for Health and Social Affairs that was announced in the White Paper on Public Health. This allocation has been maintained in the Government's proposed Budget for 2005.

Although the intention is for this work to be a permanent function of the Directorate for Health and Social Affairs, it will initially be established as a two-year project. The Directorate has allocated two man-years to the project, which will focus partly on documentation and the knowledge base and partly on developing policy and testing various measures.

According to the White Paper on Public Health, the Competence Centre is to develop expertise that will provide a basis for advising central and local authorities. In order to

ensure that such advice is supported by existing knowledge in this field and in line with the latest research findings, the Directorate for Health and Social Affairs will establish a group of 7–9 experts. The composition of the expert group will be broad-based in terms of geography, discipline and gender. The Directorate also aims to include experts from other Nordic countries. The Expert Group will be appointed by the Directorate early in 2005. The aim is to hold three to five meetings per year.

Besides providing professional advice to the authorities on issues concerning social inequalities in health, the expert group will contribute to the work of documentation, implementing measures and evaluation, and identify research needs. Individual members may take part in carrying out priority tasks at the request of and in close cooperation with the Directorate.

The Directorate for Health and Social Affairs will:

- establish a competence centre for social inequalities in health
- systematically collect information on the experience gained in this field from international organisations and other countries
- build up a knowledge base
- establish an Expert Group on social inequalities in health.

Professional networks

An important task for the Competence Centre in particular and the Directorate for Health and Social Affairs in general will be to create a meeting place for researchers and other professionals who focus on social inequalities in health. The White Paper on Public Health pointed out that a competence centre in the public administration could promote cooperation between and coordinate the work of Norwegian experts and institutions working in this field. The Directorate will seek to collaborate with the Research Council of Norway in this process.

The purpose of a meeting place is to establish closer contact and build networks between researchers in different centres and institutions and to encourage research on priority topics. For the Directorate for Health and Social Affairs, an arena of this nature will be important for maintaining an overview of and promoting research on social inequalities in health.

Through the Ministry of Health's budget for 2004, funds were allocated for a programme of research on preventive health work under the auspices of the Research Council of Norway. The total allocation of NOK 4.3 million was used to fund research on three priority areas: physical activity, diet and social inequalities in health. It was stipulated that support is also to be used to develop professional networks. Funding was granted for four projects, one of which concerned the development of groups of experts and networks.

In cooperation with research groups working in this field, the Competence Centre will help to provide a more permanent framework for professional networks. The aim is to organise seminars for relevant groups of experts and researchers approximately every six months. The programme for these seminars will also be drawn up in close cooperation with the Expert Group on Social Inequalities in Health.

The Directorate for Health and Social Affairs will:

- arrange seminars for professional and research groups

Disseminate knowledge

One of the main tasks of the Directorate for Health and Social Affairs is to increase knowledge of social inequalities in health in the general population, the public administration and public services, at central, regional and local level. The regional and local partnerships for public health work that are currently being established, and the County Governors, will be important partners in this effort.

There is a need to increase the availability of documentation on various issues relating to social inequalities in health. The Directorate for Health and Social Affairs will prepare reports on a range of subjects that can serve as reference documents, thereby raising the level of knowledge.

Use of the media will be an integral part of the work of spreading knowledge. The purpose will be to create greater awareness of this topic among the population, both by ensuring that attention is focused on new knowledge and in policy matters that have a potential impact on social inequalities in health. The Directorate will seek to use the Expert Group in a central role in this work.

As part of the efforts to spread knowledge and contribute to public debate, a conference will be arranged in 2005.

The Directorate for Health and Social Affairs will:

- contribute to seminars and conferences on social inequalities in health
- publish a series of reports and in other ways disseminate information on social inequalities in health
- participate in the public debate on social inequalities in health
- arrange a conference in 2005 on social inequalities in health

3.2.2 Strengthening research and documentation

The White Paper on Public Health underscores the need for greater knowledge of social inequalities in health. There is considered to be a need for increased knowledge in this field as regards the situation in Norway, how Norway compares with other countries, trends over time, causes and effects and effective measures.

The Directorate for Health and Social Affairs itself will not conduct research on social inequalities in health. On the other hand, with the help of the National Health Services Research Centre and the National Institute of Public Health, the Directorate will collect, systematise and make available the information that already exists, both in Norway and internationally.

Current status and trends

A great deal of knowledge could have been obtained if existing bodies of data had been more accessible. This applies to both health data and data on socioeconomic position. Through this Plan of Action, the Directorate for Health and Social Affairs wishes to strengthen the foundation of data on which research on social inequalities in health is based. Two courses of action are described below as examples of the way in which this objective may be achieved.

A working group comprising representatives from the Directorate for Health and Social Affairs, Statistics Norway and the National Institute of Public Health has been appointed to prepare a proposal for a national strategy to collect data for health monitoring. The working group is to suggest the type of data (living habits, clinical measurements, biological tests) that should be collected through health surveys to meet the needs of the health authorities. In order to monitor trends in and research on social inequalities in health, it is very important that the data collected include such background factors as gender, ethnicity, housing, education, occupation and income.

The surveys of health and living conditions conducted by Statistics Norway have been and remain an important source of data on the population's state of health. In 2005, Statistics Norway will carry out the 2005 Survey of Living Conditions, which will focus on the topics of «Health, Care and Social Contact». This will be an important opportunity to increase the knowledge base relating to social inequalities in health.

The Directorate for Health and Social Affairs will:

- work to ensure that national data collection strategies for health monitoring are designed so as to make it possible to extract information on social inequalities in health.

Causes

If we wish to tackle social inequalities in health, we will not only need to monitor developments in this field by implementing good strategies for health monitoring. We also need to conduct further research on the social determinants. As pointed out in section 2.2 above, the need for knowledge in this field has been met to varying degrees. For instance, there is a great need to learn more about the significance of childhood living conditions for social inequalities in health, and our knowledge of the potential role of psychosocial factors is far from sufficient. We will also need to gain a better understanding of how various factors interact and the impact that they have on one another.

As mentioned earlier, in 2004 research funding was publicised and distributed through the Research Council of Norway for research in the fields of physical activity, diet and social inequalities in health. It became clear from the applications submitted that there were more relevant research proposals on social inequalities in health than it was possible to grant funding for. Thus, there is an unrealised potential as regards increasing our knowledge of the causes of social inequalities in health. The Directorate for Health and Social Affairs therefore considers it important to follow up this field of research with additional projects.

The Directorate for Health and Social Affairs will:

- encourage the allocation of funding for continued research on causal factors related to social inequalities in health

Effective measures

As described above, the knowledge base – as regards which measures are effective in reducing social inequalities in health – is deficient, and much of the research that is being conducted in this field focuses on causes. Relatively little research is being done on effects (intervention research). This can be explained, as it is manageable to conduct epidemiologically designed studies to study casual relations, simply because this type of data is often available and can be analysed. Organising experiments to judge the usefulness of measures to reduce social inequalities in health is more difficult. Increased use of other research designs is therefore necessary in order to acquire knowledge of the effect of measures.

In the public health administration, the National Health Services Research Centre will be able to play an important role in developing this type of knowledge base. The Research Centre should be able to promote a stronger focus on social inequalities in at least three ways: 1) by assessing distributional effects when preparing systematic reviews, knowledge abstracts and methodology reviews, 2) by ensuring that surveys to measure the quality of health services include questions concerning the degree to which the service is provided in a good way to all social groups, and 3) by directly reviewing effects of measures aimed at promoting social equality in health. The Directorate for Health and Social Affairs therefore

wishes to reinforce these aspects of the work of the Research Centre. It may also be appropriate to seek information from other relevant research and study centres.

The Directorate for Health and Social Affairs will:

- strengthen the National Health Services Research Centre, by commissioning it to carry out specific assignments, as a resource for central and regional authorities in determining the effects of measures to tackle social inequalities in health
- commission evaluations of the effect of measures from other relevant research groups

3.3 Developing measures to reduce social inequalities in health

Because many of the factors that affect health are found in sectors other than the health sector, health equality considerations must be highlighted and taken into account in these other sectors as well. Besides responsibility for health services, the role of the health sector itself includes responsibility for:

- obtaining and publishing basic facts related to the population's state of health and causal connections between health, sickness and various social and individual factors,
- defining basic principles and premises and playing a proactive role in relation to other sectors, and in general social planning and land-use planning
- contribute to develop, implement and evaluate methods and measures that can be used in the health sector or in other sectors of society to improve public health.

With a view to developing measures based on the best available knowledge, this plan therefore calls for efforts at three levels. At the first level, tools will be developed to highlight the health consequences of decisions made at various levels of society. The second level consists of efforts to adapt the Directorate's own instruments for this purpose. At the third level, a foundation will be laid for a national strategy that involves all sectors.

3.3.1 Health impact assessments

To highlight the way decisions in different sectors and at different levels affect the distribution of health in the population, we need cross-sectoral tools. The White Paper on Public Health proposes to further develop health impact assessments to provide such a tool. The Directorate for Health and Social Affairs has been assigned the task of establishing a group of experts who will focus on:

- developing methodology and summing up lessons learned
- building competence, developing networks and providing guidance at the regional and municipal levels
- providing professional and technical assistance and guidance to the Ministry of Health

in connection with impact assessments mandated by the Instructions for Official Studies and Reports, and integrating health considerations into tools developed by the Ministry of the Environment.

The purpose of health impact assessments is to estimate the positive and negative changes in health risk that can be ascribed to a policy, strategy, programme or project. Health impact assessments thus help to provide a systematic overview of the consequences that different decisions have for all or parts of the population. An impact assessment does not present a solution, but helps to ensure that decisions are better informed. For instance, decision-makers can look at the effects for special population groups that might be affected. An impact assessment can therefore help decision-makers to predict whether a decision will result in increased social inequalities in health.

The Directorate for Health and Social Affairs will:

- develop impact assessments as a tool that can be used to predict whether a decision will alter social inequalities in health. Such tools must be adapted for use:
  - in the formulation of central government policy, such as in connection with plans of action and national strategies covered by the Instructions for Official Studies and Reports
  - regionally and locally in designing measures and planning on the basis of the Planning and Building Act and the Municipal Health Services Act
- develop and implement guidelines for impact assessments for use by national, regional and local decision-makers.

3.3.2 The Directorate for Health and Social Affairs's own policies

The Directorate for Health and Social Affairs is responsible for promoting professional development and implementing national policy in the fields of health and social affairs. The Directorate's primary goals have been formulated as «social security and good health», which are to be realised through:

- comprehensive and effective preventive efforts to forestall the development of social and health-related problems, and
- the provision of high-quality, easily accessible social and health services that meet the needs of users and patients

The Directorate for Health and Social Affairs seeks to improve the health and social situation of the population either directly or through the services provided. An important task is to ensure that the Directorate's own policies are designed with a view to reducing the social inequalities in health, for instance in connection with:

- the development of regulatory frameworks
- the establishment and dissemination of professional guidelines
- the development and implementation of guidance material
- thematic action plans (mental health, accidents, tobacco, nutrition, physical activity, prevention of unwanted pregnancies, etc.), or
- projects and programmes directly targeting vulnerable groups.

The Directorate for Health and Social Affairs will:

- ensure that relevant programmes, plans and measures carried out by the Directorate take account of social differences in health
- play a proactive role in incorporating the inequality perspective into processes with other actors in society

3.3.3 Foundation for a future cross-sectoral strategy

Cross-sectoral challenges require cross-sectoral solutions. The factors that generate and perpetuate social inequalities in health lie far beyond the control of the Directorate for Health and Social Affairs and the health sector alone. If we are to come to grips with the causes of social inequalities in health, we need to agree on comprehensive packages of measures on the national level. Through this plan of action, the Directorate will lay a knowledge based foundation for a broader national effort. When, in the next phase, an inter-ministerial strategy to tackle social inequalities in health is drawn up, it will be based in the Ministry of Health and Care Services.

The Directorate for Health and Social Affairs will:

- prepare a knowledge based foundation for a national, cross-sectoral strategy to tackle social inequalities in health.

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