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European strategies for tackling social inequities in health: *Levelling up Part 2*



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- and
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FOREWORD

This document on European strategies to tackle social inequities in health is very timely, given the recent endeavours by an increasing number of European countries to move from describing to acting on the problem. It is part of a European wide effort to develop useful tools and guidance for countries on the issue of equity in health and is the second of two documents focusing on levelling up to tackle social inequities in health. The first document – Levelling up (part 1) – focuses on concepts and principles for acting to tackle social inequities in health. Levelling up (part 2) focuses on: presenting the latest evidence about the nature and extent of the problem in Europe; illustrating an approach and policy options that can be taken to tackle social inequities in health; and how to develop strategies for tackling social inequities in health.

Over the past two decades, WHO European Member States have been at the forefront in advocating for policies that promote equity, including agreement on a common health strategy in 1985, which incorporated a landmark equity target. In 2003, WHO reaffirmed this commitment by opening the WHO European Office for Investment for Health and Development (the WHO Venice Office), which focuses specifically on the social determinants of health and what health systems can do to confront them. In 2006, the WHO Regional Director for Europe stated that providing support for the reduction of health inequities will be one of the six strategic directions for the Regional Office in the long-term plan for 2020.

Good practice and use of effective measures to tackle social health inequities means ensuring that a country's health system is not falling short of its performance potential. Health systems encompass all the people and action whose primary purpose is to improve health. The goals of a health system must include reducing health inequities in ways to improve the health status of the worst-off population groups. Thus, the content of this second document on levelling up is properly conceived within a performance framework of the health system. Furthermore, this document focuses upon major determinants outside the health system, such as different types of economic growth strategies, inequities in incomes, poverty, unemployment and education.

The document is the result of a wide range of consultations including discussion of earlier versions of this paper at meetings organized by WHO as well as in international fora. This final version has greatly benefited also from two European consultations on how to mainstream the social determinants of health and the reduction of health inequities involving ministries of health, cross-government policy-makers, academia and civil societies from over 30 Member States (Edinburgh 2006 and London 2007). It is also the result of inputs from the WHO Regional Office for Europe technical units and WHO Country Offices. The document has also built upon comments from a wide range of experts and policy makers working at international, national and sub-national level. Finally, to ensure that this remains a useful tool for countries in tackling social inequities in health, we will develop a process for monitoring and regular updating of the document.

Our expectation is that together with Concepts and principles for tackling social inequities in health: Levelling up Part 1 (Whitehead & Dahlgren, 2007), this work will help policy-makers in their efforts to address social inequities in health in a Europe that is rapidly changing.

Erio Ziglio

Head,

WHO European Regional Office for Investment for Health and Development

Abbreviations used in this report

ALPS	Affordability Ladder Program
BMI	body mass index
CAP	the European Union Common Agricultural Policy
CCEE	the countries of central and eastern Europe
NIS	newly independent states
EU	European Union
GDP	gross domestic product
GNP	gross national product
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
SARS	severe acute respiratory syndrome
UNDP	United Nations Development Programme

Introduction

“The social conditions in which people live powerfully influence their chances to be healthy. Indeed factors such as poverty, social exclusion and discrimination, poor housing, unhealthy early childhood conditions and low occupational status are important determinants of most diseases, deaths and health inequalities between and within countries” (WHO, 2004).

Even in the high- and middle-income countries of the WHO European Region, the possibilities for surviving and living a healthy life are still closely related to the socioeconomic background of individuals and families. These possibilities are reflected in substantial and even increasing social inequities in health within countries across Europe.

These inequities in health are both unfair and avoidable, as they are caused by unhealthy public policies and lifestyles influenced by structural factors (Whitehead & Dahlgren, 2007). They even contradict the basic human rights principle that everyone has “the right to the highest attainable standard of physical and mental health” (Kälin et al., 2004). *Levelling up* the health status of less privileged socioeconomic groups to the level already reached by their more privileged counterparts should therefore be a key dimension of all international, national and local health policies.

Increasing numbers of countries and international organizations have acknowledged the importance of reducing this health divide. The Secretary of State for Health of the United Kingdom, Patricia Hewitt, expressed this concern at the European Union (EU) Summit on Tackling Health Inequalities, in October 2005, by stating (Hewitt, 2005):

“For us within the European Union (EU) reducing health inequalities is a central part of our common European value of a society based as much on social justice as on economic success. ... Narrowing this health gap and making good health a reality for everyone is essential if we are to create a Europe of social justice as well as prosperity”.

The importance of improving health in general and improving it among low-income groups in particular, is a matter of even greater urgency in the countries of central and eastern Europe (CCEE) and within the Commonwealth of Independent States (NIS). The typical trend in health status for the population as a whole in most – but not all – of these countries is one of stagnation or decline, accompanied by increasing social inequities in health. Political leaders appear to increasingly recognize the need to tackle these negative trends. For example, this was a main theme in President Putin’s State of the Nation Address to the Federal Assembly in April 2005 when he stressed that, “We cannot reconcile ourselves to the fact that the life expectancy of Russian women is nearly 10 years, and for men nearly 16 years, shorter than in western Europe” (Putin, 2005).

International organizations, such as WHO, are also promoting and supporting efforts to reduce social inequities in health. Recent examples of WHO efforts are the Commission on Social Determinants of Health (WHO, 2004), contributions to the Bangkok Charter for Health Promotion in a Globalized World (WHO, 2006a) and the new WHO European Office for Investment for Health and Development, in Venice. In fact, one of the key ethical values in *Health 21: the health for all policy framework for the WHO European Region* is “Equity in health and solidarity in action” (WHO Regional Office for Europe, 1999; WHO Regional Office for Europe, 2005c). Equity in health is also stated as a core value in 34 of the 40 national health for all policies developed in different countries within the WHO European Region (WHO, 2005c), as well as in the Bangkok Charter for Health Promotion in a Globalized World.

Very few countries, however, have developed specific strategies for integrating equity-oriented health policies into economic and social policies. The equity perspective is also missing in many specific programmes that focus on various determinants of health, even in those countries that claim that reducing social inequities in health is an overriding objective for all health-related policies and programmes. Considering that people view health as constituting one of the most important dimensions of their welfare, the low priority given it is striking. Richard Wilkinson has noted (Wilkinson, 2005) that:

“Remarkably few governments have pursued policies to reduce the tens of thousands of extra deaths lower down the social hierarchy that contribute to health inequalities. ... If people were dying from exposure of some toxic material the offices would be instantly closed down until the danger had been removed. But because social processes cause these deaths, there is none of the same sense of urgency”.

The purpose of the present report is to stimulate and facilitate the development of evidence-based strategies for reducing social inequities in health. The focus of the report is on the main determinants of social inequities in health, which can sometimes differ from the main determinants of health for the population as a whole. The report pays special attention to policies and actions that either reduce or increase inequities in health, because the power balance between these forces determines the possibilities and constraints of achieving equity-oriented health targets.

The policy options presented in this report are based on scientific evidence or experiences gained in different countries. Policy changes and different interventions are, however, rarely evaluated in terms of their health impact on different socioeconomic groups. Consequently, many of the policy options presented in this report are based on the assumption that actions that change the determinants of social inequities are very likely to influence inequities in health. Obviously, there may be cases where several coordinated actions are needed to reduce observed social inequities in health and there may be other cases where the time lag between an action and the actual health impact is not known. This type of uncertainty is not unique to strategies that aim to reduce social inequities in health. It is typical of most economic and social policies, and it is accepted in the WHO health policy framework, Health 21, for the European Region: “Good health evidence includes not only research results but also other types of knowledge that decision-makers may find useful.” (WHO Regional Office for Europe, 2005c). The policy options presented in this report should be viewed and assessed in this perspective.

The values that underpin this report are based on internationally endorsed social human rights, and the core values as stated in the health for all policy framework for the WHO European Region (WHO Regional Office for Europe, 2005c).

These stated values clearly indicate the preferred direction of change, even when it is difficult to assess the magnitude of the change during a certain period of time.

Given the existence of major differences, between countries, in the magnitude and causes of social inequities in health, there is, however, no strategic blueprint for tackling this health divide. Opportunities for (and barriers to) the implementation of equity-oriented policies may also differ due to a number of factors, such as political ideologies, institutional frameworks and the strength of different global and national vested interests. The policy options presented in this report therefore need to be assessed and developed further for each specific country. When assessing and developing country-specific strategies for reducing social inequities in health, however, the overall analytical approach of this report should be valid across most of the European Region.

The overall message of this report is that efforts to reduce social inequities in health need to be seen as an integral part of socioeconomic development policies (in general) and specific public health programmes and policies (in particular).

Key terms used in this report

A clear distinction must always be made between inequities in health status and inequities related to health services. See also the companion paper (Whitehead & Dahlgren, 2007), which discusses concepts and principles related to some of the definitions below.

Terms related to inequities in health status

Equity in health. This implies that, ideally, everyone could attain their full health potential and that no one should be disadvantaged from achieving this potential because of their social position or other socially determined factors.

Equity-oriented health policies. These are policies that aim to reduce or eliminate social inequities in health.

Social inequities in health. These are systematic differences in health status between socioeconomic groups, as measured by income, education and occupation. All systematic social inequities in health within a country are socially produced, modifiable and unfair.

The phrases *social inequities in health* and *social inequalities in health* are synonymous in this report. They both carry the same connotation of health differences that are unfair and unjust.

Health divide and health gap. These terms are used interchangeably with the phrase social inequities in health.

Relative differences in health. These measure the ratio of the health-indicator value of the disadvantaged group to the corresponding value of the reference group. The relative difference is thus a measure of the increased risk of experiencing poor health in, for example, the lowest socioeconomic group, as compared with the highest socioeconomic group or the population as a whole. Relative differences can also be stated in terms of the percentage differences between the two groups.

Absolute differences in health. These measure the difference between the indicator value for the lowest and highest socioeconomic group – for example, the excess of deaths due to a certain disease that occurs (per 100 000 population) in the disadvantaged group, as compared with the most privileged group.

Gender differences in health. These are economically, socially or culturally determined systematic differences in health between men and women – in contrast to biological differences between the sexes. Social inequities in health should, whenever possible, be described and analysed separately for men and for women, as both the magnitude and causes of observed differences may vary between the two sexes. Conversely, gender differences in health should, whenever possible, be related to socioeconomic background.

Ethnic differences in health. These are systematic differences in health between different ethnic groups. Social inequities in health should, whenever possible, be described and analysed by ethnic background in countries with marked ethnic discrimination, as both the magnitude and causes of observed differences in health may differ by ethnic background within different socioeconomic groups. Conversely, descriptions and analyses of health by ethnic background should, whenever possible, be analysed by socioeconomic background, to assess the magnitude of socioeconomic differences in health within different ethnic groups.

Geographical differences in health. These are differences in health observed between different geographical areas. Geographical differences in health should, whenever possible, be described and analysed in terms of the age and socioeconomic structure of the areas compared. The observed health status in areas with a homogenous social structure can be used – with due consideration to differences in age structure – as a proxy for assessing social inequities in health when information about the health status of different socioeconomic groups does not exist or is very limited.

Determinants of health. These are factors that influence health positively or negatively. This report focuses on social, economic and lifestyle-related determinants of health – that is, factors that can be influenced by political,

commercial and individual decisions – as opposed to age, sex and genetic factors, which also influence health but are not, on the whole, open to influence by political or other types of policy.

Determinants of social inequities in health. These are social, economic and lifestyle-related determinants of health that increase or decrease social inequities in health. These factors can always be influenced by political, commercial and individual choices/decisions.

Terms related to inequities in health care

Equity in health care. This incorporates notions of fair arrangements that allow equal geographic, economic and cultural access to available services for all in equal need of care. Other dimensions of equity in health care include equal possibilities for adequate informal care and the same quality of professional care for all.

Inverse care law. This is an expression often used to describe a situation where “the availability of good medical care tends to vary inversely with the need for it in the population served” (Hart, 1971).

Fair financial strategies for health services. These imply progressive financial contributions, according to ability to pay, which are used to provide care according to need, regardless of ability to pay.



Part A.

**The nature of the problem and
pathways to social inequities in health**

I. The magnitude of the problem

The very first step in developing a strategy for reducing social inequities in health within countries is to assess the magnitude of the health divide and how it has changed over time. This must be put in the context of the overall trends in population health.

Historical perspectives

In a historical perspective, the possibility of surviving and living a healthier life has improved beyond expectations. The average human lifespan has doubled over the past 200 years, and life expectancy is still increasing in most countries (Williams, 2004). The achievements of better health are, however, still very different between rich and poor countries and between groups within countries that are better off and less privileged. The success stories of reduced social inequities in health are less visible, but they do exist.

From a European perspective, major achievements have been made, for example, in reducing social inequities in mortality, as measured in *absolute* terms (Mackenbach et al., 2002). These achievements are closely related to general improvements in living and working conditions.

From a historical perspective, certain relative *differences* in health between different socioeconomic groups have also been reduced and (even) almost eliminated for certain health indicators. For example, the substantial socioeconomic differentials in infant mortality found in Sweden in the early 1930s have been almost eliminated, thanks to such deliberate policies as the introduction of free maternal and child health services, housing policies that improve the housing stock, financial support to low-income families and general welfare reforms (Burström, 2004). This is not, as sometimes assumed, an automatic by-product of economic development, as many countries in Europe with the same level of economic development as Sweden still experience substantial inequities in infant mortality (Mielck et al., 2002). The key ingredients in the Swedish case

are the healthier and more equity-oriented economic and social policies. It is also important to note that this reduction in social inequities in infant mortality was achieved in spite of substantial social differences within Swedish society as a whole. So the argument sometimes put forth that the elimination of social inequities in health is utopian is thus not borne out by the evidence.

Despite some successes, major inequities in health still exist in all countries across Europe and, measured in relative terms, the general trend is increasing, rather than decreasing. Tackling these inequities in health – to *level up* the health status of disadvantaged groups to the same level of health as already experienced in advantaged groups – is, today, one of the most important public health challenges. When developing strategies for reducing social inequities in health within countries in the European Region, it is of critical importance to take into consideration the differences in general health trends between western European countries and those countries in eastern Europe and the former Soviet Union.

In western Europe, the overall pattern for the population is that of rising life expectancy. At the same time, social inequities in health are widening, when measured in relative terms. This widening gap is caused by a relatively slower improvement in health among lower socioeconomic groups than among higher socioeconomic groups. In contrast, some of the CCEE and the NIS have experienced a widening gap in social inequities in health, against a backdrop of static or declining life expectancy for the population as a whole. In these cases, widening inequities are brought about by lower socioeconomic groups suffering a greater decline in health than that suffered by the population as a whole. Given the differences in overall trends, the health divide for west and for east or central European countries is described separately in the sections that follow.

Inequities in health: western European countries

Social inequities in mortality are substantial in most, if not all, western European countries (for a review, see Mackenbach, 2005). The excess in mortality rate in lower socioeconomic groups is often 25–50% or higher than in the upper

socioeconomic groups. These inequities tend to be greater among men than among women, and they start early in life and persist into old age. In most countries, almost half of the excess mortality in lower socioeconomic groups is explained by inequities in cardiovascular diseases. Other major diseases with marked social inequities are certain cancers, psychosocial problems and injuries, but a social gradient is found for almost all common diseases.

Over the past two decades, many west European countries have experienced an unexpected and significant increase in these social inequities “without much evidence that the widening of the mortality gap will stop in the near future” (Mackenbach, 2005). Increasing inequities in mortality during the last two decades have been well documented in, for example, England and Wales (Drever & Whitehead, 1997), Finland (Valkonen, 1993), France (Lang & Ducimetiere, 1995), the Netherlands (van de Mheen, Reijneveld & Mackenbach, 1996), Spain (Regidor et al., 1995) and Sweden (Vågerö & Lundberg, 1995).

The possibilities for assessing social inequities in health are better in some countries than in others. Unique records, which allow detailed analysis of social inequities in mortality, are found in England, where these differences have been documented for more than 150 years (Drever & Whitehead, 1997). For example, in England and Wales, inequities in life expectancy between professionals and unskilled men working at manual jobs have increased, from 5.4 years in the 1970s to more than 8 years in the 1990s (Mackenbach, 2005).

Recent data from registries in England and Wales also reveal that men between 20 and 64 years of age in semi- and unskilled manual occupations are three times more likely to die from coronary heart disease and stroke than men in the same age group in professional and managerial occupations. An estimated 17 000 lives a year would be saved in England if all men of working age had the same low mortality rate as that of men in professional and managerial groups (British Department of Health, 1999). Studies also illustrate a gradient across society, and not just between an extreme group in poor health and the rest in reasonably good health. Typically, a stepwise or linear decrease in health is seen with decreasing social position and is referred to as the *social gradient* (Marmot et al., 1997).

Social inequities in mortality can also be expressed in terms of chances of survival. This perspective may have a greater political impact, as it shows, for example, that “15 year old boys living in the most affluent areas of Glasgow have a 90% chance of getting to the age of 65 whereas boys in the poorest parts just have a 50% chance” (Burns, 2005). The Secretary of State for Health in the United Kingdom used an even more striking way of describing existing social inequities in health by pointing out that on a journey on the London Underground “*from Westminster to Canning Town in east London, just eight stops, life expectancy for men drops by one year per stop. That pattern in some form is repeated in every European country which is utterly unacceptable in civilised developed countries*” (Hewitt, 2005).

In France, the probability of men who do manual work dying between 35 and 65 years of age is twice as high as that for men in senior executive positions (Mesrine, 1999). In Germany, 16% of children 11–15 years of age with parents belonging to the lowest social class report poor health compared with 1% among children with parents from the upper social class (Klocke & Hurrelmann, 1995).

Social inequities in self-reported health are sometimes even greater than the health divide in mortality. As an example, a study that compared 11 western European countries showed that the risk of self-reported ill health was one and a half to two and a half times greater at the lower half of the socioeconomic ladder than at the upper half (Mackenbach et al., 2002). Unlike inequities in mortality during the 1980s and 1990s, these social inequities in perceived health have been rather stable in most west European countries (Mackenbach, 2005).

A focus on gender-specific social differences in health is important, as low-income women typically experience the double burden of being discriminated against for both being poor and being a woman. The gender dimension of the increasing inequities in health has been highlighted in Sweden, where women who do manual work and women who work as lower civil servants were those losing most healthy years since 1980 (National Board of Health and Social Welfare, 2001).

Social inequities in health account for a substantial part of the total burden of disease in the welfare states of western Europe. In Sweden, about a third of the total burden of disease is a differential burden that results from socioeconomic inequities in health. For both sexes, most of this differential burden falls on unskilled workers. Ischaemic heart disease accounts for the greatest absolute difference between the least and most advantaged groups (Ljung et al., 2005). As many countries in Europe have larger absolute socioeconomic differences in mortality than does Sweden (Vågerö & Eriksson, 1997), it is very likely that the share of the total burden of disease due to inequities in health is even greater in these countries than in Sweden. Consequently, efforts to reduce inequities in health should also be viewed as an important strategy for raising the average health status of the population as a whole. Indeed, in some countries it is becoming clear that health gains for the whole population will not be achieved without extra efforts to reduce the social inequities in health within the country. This is the situation in England (population 50 million in 2004), where it has been estimated that national health targets will not be achieved unless additional progress is made in the north-west region of the country (population 7.4 million), the region with the worst health and the highest levels of disadvantage.

Inequities in health: the NIS and CCEE

One of the great tragedies of our time is the declining health and increasing inequities in health experienced during the transition period from a planned to a market economy in the NIS and CCEE. Life expectancy in the Russian Federation today is lower than it was 40 years ago (Vågerö, 2005). Between 1991 and 1994, more than six years of life expectancy among men and more than three years among women were lost. Noncommunicable diseases are the leading cause of death, with cardiovascular diseases, cancer and injuries accounting for 78% of all deaths among the working population in 2003 (World Bank, 2005). The main burden of this crisis in mortality was borne by males in lower socioeconomic groups (Walters & Suhrcke, 2005). Male life expectancy at birth was only 58 years (World Bank, 2005), which is far below life expectancy in countries at a much lower level of economic development, such as Vietnam. Regional differences in

life expectancy in the Russian Federation are also increasing. Between 1990 and 2000, the difference between the oblasts (administrative regions) with the highest and lowest life expectancy increased, from 10.5 years to 17.9 years (Ivaschenko, 2004).

These negative trends in health in general, and among men with a low socioeconomic status in particular, have widened the health divide between the Russian Federation and west European countries, from 4 to 14 years during the last three decades (World Bank, 2005). The gender differences in life expectancy are also remarkable in the Russian Federation, as Russian women live about 14 years longer than Russian men (World Bank, 2005). The corresponding gender gap in west European countries ranges from 5 to 7 years. These figures clearly show that present economic transition trends generate a significant number of avoidable deaths. For example, an estimated 17 million additional Russians would be alive today if age-specific mortality rates had followed the patterns of the 15 countries that belonged to the EU before 1 May 2004 (Andreev, 2005).

Trends in Russian morbidity and disability are also of concern. Compared with 40% in the highest quintile, almost 60% of those in the lowest quintile reported bad or very bad self-perceived health (NOBUS Survey, 2003). Also, a healthy middle-aged cohort in the Russian Federation would have less than a third the chance of surviving into old age without disability as that of an equivalent cohort in Sweden (Bobak et al., 2004).

Many overall populations in other eastern and central European countries have experienced deteriorating health – particularly among men – and increasing social inequities in health (Groenhof et al., 1996). Estonia is one of the countries that have experienced a very substantial increase in social inequities in health between 1988 and 2000. For example, the excess death rate for adults in the lowest socioeconomic group (measured by education) was 50% in 1998, and it increased to 138% by 2000 (Mackenbach, 2005). By the year 2000, a male graduate 25 years of age could expect to live 13 years longer than a man of the same age in the lowest educational group (Leinsalu, Vagero & Kunst, 2003). The corresponding gap in life expectancy between women graduates and women from the lowest

educational group was 8.6 years. When comparing groups with different levels of education, the prevalence of self-reported poor health among women was three times greater in women with a low level of education than in women with a high level of education, while this difference was less pronounced among men with different educational backgrounds (Walters & Suhrcke, 2005).

The social patterns of disease in other countries in eastern Europe are similar. For example, the excess risk of dying for people in lower socioeconomic groups is more than double that for people in higher socioeconomic groups in Lithuania, Poland (for men only) and Slovenia (Mackenbach, 2005). In Hungary, the risk of premature death among men doing manual labour was found to be almost double that of men doing non-manual labour (Kunst, 1997). One exception to these negative trends, however, is the Czech Republic, where the mortality rate for the population as a whole changed for the better without an adverse trend for lower socioeconomic groups (Mackenbach, 2005).

One disease that is closely linked to poverty and poor living conditions is tuberculosis. Over the past 15 years, it has reached emergency levels in the eastern half of the European Region. In 2004, over 400 000 cases of tuberculosis were reported, 80% of which were in just 16 countries: in the Baltic states, the NIS and Romania (WHO, 2006b). Tuberculosis caused about 69 000 deaths in the Region in 2004. The rates of multidrug-resistant tuberculosis in the CCEE and NIS are among the highest in the world – over 10 times the rate for the rest of the world, with rates as high as 14% in new patients. Of the 20 countries with the highest rates of multidrug resistance to tuberculosis among previously treated cases, 14 are in the WHO European Region. The Region also reports the highest rate of treatment failure (7%) and the second-highest rate of death as a treatment outcome (6%) (WHO, 2006b). The burden of this disease is not spread evenly across the population in these countries, but falls most heavily on the disadvantaged. The main risk factors for tuberculosis in the Russian Federation, for example, are unemployment, poverty, drinking raw milk (another indicator of poverty), overcrowding, illicit drug use and imprisonment (Coker et al., 2006).

A report prepared by the WHO European Office for Investment for Health and Development reviewed recent literature on socioeconomic inequities in health in the CCEE and NIS (Walters & Suhrcke, 2005). It provides compelling evidence of substantial and increasing social inequities. The negative effects on health experienced by large segments of the population are greatest among those with a lower socioeconomic status. The report highlights the importance of using existing data, which often seems to be underutilized, to describe and analyse social inequities.

It is surprising that not more use has been made of vital registration and census data to investigate the association between socioeconomic status and life expectancy given that many countries in the region have reasonable good health registration and some measures of socio-economic status, often education recorded on death certificates.

Growing recognition of the problem

Against this background of inequity, increasing numbers of countries and international organizations now recognize the importance of developing more focused and comprehensive strategies for tackling the health divide within the European Region. Many declarations to tackle inequities, however, appear to be merely rhetorical, as they have not been followed by any comprehensive policies and actions to address the problem.

In some countries, policy-makers may even be unaware of the magnitude and trends of existing inequities in health among their people. This is quite remarkable, considering that health is one of the most important dimensions of human well-being and development.

One barrier to recognizing the problem is that social inequities in health are *invisible* in everyday life, where death and disease are often perceived as hitting family and friends quite randomly. Imagine the possibility of observing who is to live and who is to die early due to an avoidable cause; most likely, this *visibility* would change the health agenda radically.

Because of this *invisibility*, there is an urgent need not only to improve health information systems, but also to make the findings known to politicians and the public alike. Some improvements are already occurring. In the future, for example, the EU Health Information System will enable Member States to have a much more sophisticated understanding of health inequities, both within their countries and in comparison with other parts of Europe (Kyprianou, 2005).

Major efforts, however, remain to be made at local, national and international levels to put social background on an equal footing with that of age and sex in descriptive analyses of morbidity and mortality. This is important, as information on social inequities in health is valuable not only when formulating and assessing strategies for health, but also when devising ways to allocate resources for health services according to need. Facts about the health divide can also be of critical importance when developing social policies in general. For example, shorter life expectancy among blue collar workers, compared with the rest of the population, was a major argument for a one year earlier retirement age for manual workers in a recent reform of the pension system in Italy (Costa et al., 2006). Finally inequities in health and how they change over time can be used as indicators of overall social development within a country.

Policy pointers for analysis of health inequities

- Use both absolute and relative differences, whenever possible, to express inequities in health. This is also important from a policy perspective, as general welfare strategies are aimed at changing absolute inequities in health, while both general and equity-oriented strategies are needed to reduce relative differences in health.
- Use income, occupation or education to measure social position. These all function reasonably well as indicators of social position in European societies, though they all have their drawbacks. In practice, the choice is often limited to what is most readily available in a country's routine information systems.
- Use the health status in economically privileged and less privileged areas as a proxy for social inequities in health when data on the health of socioeconomic groups is lacking. The argument against this – that equity-oriented policies cannot be developed due to lack of health data linked to social position – can and should always be rejected.
- Ensure that health information systems provide information about the distribution of different causes of death and perceived health problems by social background and not only by age and sex. Whenever possible, social position and gender should be considered together, as both the magnitude and causes of observed social inequities in health often differ between boys or men and girls or women.
- Develop systems and specific indicators for monitoring and analysing social determinants of health, in general. In particular, focus on the determinants of social inequities in health – that is, those determinants that significantly reduce or increase social inequities in health.
- Publish periodic reviews – public health reports – that include in-depth analytical descriptions of the magnitude and trends in inequities in health and the main determinants that generate them. Many countries already produce different types of periodic public health reports, and one recommendation from the EU Summit on Tackling Health Inequalities, in October 2005, was to produce such reports every five years.
- Carry out projections of lives saved or health improved when alternative policies for a particular determinant of health are being considered. These projections are already done in some countries when different road safety measures are being considered. Such prospective health impact assessments could be extended to other determinants of health, and an equity perspective could be added.

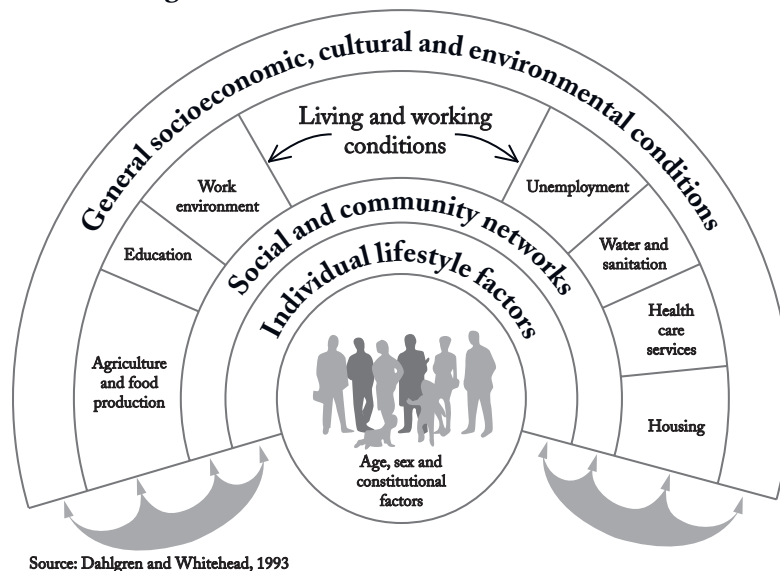
II. Understanding the root causes

The root causes (determinants) of observed social inequities in health need to be understood before more effective policies can be formulated to tackle them. Conceptually, however, the determinants of overall population health have often been mixed up with the determinants of social inequities in health, and both sets of determinants have been treated the same for policy considerations. The danger of such an approach is that the ensuing policy tends to be very general and is ineffective in reducing the health divide. This section therefore aims to make this distinction clear. It starts by reviewing the main general determinants of health. It then goes on to outline the five key mechanisms by which these determinants of health may operate to cause social inequities in health. The implications for equity-oriented policies and strategies are flagged for each of the five main determinants of inequities in health.

Determinants of health

The determinants of the general health of the population can be conceptualized as rainbow-like layers of influence (see Fig. 1).

Figure 1. The Main Determinants of Health



In the centre of the figure, individuals possess age, sex and constitutional characteristics that influence their health and that are largely fixed. Surrounding them, however, are influences that are theoretically modifiable by policy. First, there are personal behaviour factors, such as smoking habits and physical activity. Second, individuals interact with their peers and immediate community and are influenced by them, which is represented in the second layer. Next, a person's ability to maintain their health (in the third layer) is influenced by their living and working conditions, food supply, and access to essential goods and services. Finally, as mediator of population health, economic, cultural and environmental influences prevail in the overall society. This model for describing health determinants emphasizes interactions: individual lifestyles are embedded in social norms and networks, and in living and working conditions, which in turn are related to the wider socioeconomic and cultural environment.

The determinants of health that can be influenced by individual, commercial or political decisions can be positive health factors, protective factors, or risk factors.

Positive health factors. These contribute to the maintenance of health. Fundamental positive health factors are, for example, economic security, adequate housing and food security. Control over life outcomes and enjoying good relationships in the home and other emotionally rewarding social relationships are also important positive health factors (Wilkinson, 2005).

Protective factors. These are factors that eliminate the risk of, or facilitate resistance to, disease. The classical example is immunization against a variety of infectious diseases. Psychosocial factors, such as social support and a sense of purpose and direction in life, are also increasingly recognized as factors that protect health (WHO, 2002). Healthy diets, such as the Mediterranean diet with a high consumption of fruit and olive oil, is also considered to be protective (Costa et al., 2006).

Risk factors or risk conditions. These cause health problems and diseases that are potentially preventable. These risk factors or risk conditions can be social or

economic or can be associated with specific environmental- or lifestyle-related health hazards, such as polluted air and smoking.

In practice, making the distinction between these categories of determinants may be difficult at times. As the focus is typically on risk factors, it is useful to try to identify positive and protective factors. The relevance of having a holistic perspective on the determinants of health can be illustrated by the choice of focus when considering a group exposed to a certain risk factor – for example, 5 people may fall ill and 95 remain healthy. Medical research often concentrates on the question of why those 5 individuals get this specific disease, while it is at least equally important to identify the factors that protect the 95 who – despite being exposed – remained healthy.

The importance of the contribution of different risk factors to the total burden of disease should be assessed, so that priorities can be set and appropriate interventions and strategies developed. This type of risk assessment has been performed by WHO (2002). **Table 1** lists the 10 main contributors to the total burden of disease in Europe, as identified by WHO. All these contributors could be considered *downstream* behavioural risk factors. As a basis for action, these specific risk factors provide only a partial base, as the broader, more *upstream* determinants of health shown on the right of the table are not quantified in the WHO analysis.

A comprehensive health strategy for a specific country should, of course, include both downstream and upstream determinants of health and the relationships between the two, as they are often interlinked closely. For example, analyses of upstream unhealthy economic and social determinants of health need to be linked to downstream causes of certain diseases and health problems. Conversely, downstream determinants of health, such as unhealthy lifestyles, should be seen in the context of their upstream influences. The success of tobacco control programmes in many countries can be attributed to policies that include actions on both upstream determinants (such as legislation and taxation of tobacco products) and downstream health education and cessation programmes.

Table 1

Important contributors to the total burden of disease in the WHO European Region, 2002

Downstream	Upstream
Ten key behavioural risk factors for Europe, identified by WHO	Broader risks to health not captured by precise quantitative analyses
1. Tobacco	- Global neoliberal trade policies
2. High blood pressure	- Income inequalities
3. Misuse of alcohol	- Poverty
4. Too high cholesterol	- Work-related health hazards
5. Overweight	- Lack of social cohesion
6. Low fruit and vegetable intake	
7. Physical inactivity	
8. Drug abuse	
9. Unsafe sex	
10. Iron deficiency	

Source: WHO (2002).

Table 2

Percentage of total burden of disease caused by specific risk factors/conditions in the EU and Sweden, 1997

Risk factor/condition	EU	Sweden
Tobacco	9.0	8.0
Alcohol	8.4	3.5
Obesity	3.7	2.8
Work environment	3.6	2.2
Diet: low fruit and vegetable intake	3.5	3.5
Relative poverty	3.1	1.2
Unemployment	2.9	2.4
Narcotics	2.4	1.7
Exercise: too little	1.4	1.4
Diet: too much unhealthy fat	1.1	1.5

Source: Adapted from Diderichsen, Dahlgren & Vågerö (1997).

The importance of a specific upstream or downstream risk factor can be quite different in different countries within Europe. **Table 2** illustrates, for example, that in Sweden the negative health impact of alcohol on the burden of disease is less than half that of the impact in the 15 countries that belonged to the EU before 1 May 2004 as a whole. Each country needs its own assessment of which determinants of health are the most significant for their national context.

Determinants of social inequities in health

Knowledge of the social determinants of health (shown in Fig. 1 and 2) is necessary, but not sufficient, for identifying and analysing the determinants of social inequities in health. The analysis of causal factors needs to be developed further, *as the determinants of inequities in health may be different from the social determinants of health for the whole population – that is, the most important determinants of health may differ for different socioeconomic groups*. For example, unhealthy physical work environments are a major risk factor for unskilled workers in Sweden, while this is not the case for senior civil servants or for the population as a whole (Lundberg, 1991).

Poverty is another example. For a high-income country, the role played by poverty in determining the overall health of the population may only be a minor one. The size of its role will depend on how many individuals live in poverty in that country. In a country where, for example, the prevalence of poverty is low, poverty may only account for 2% of the total burden of disease on the population. At the same time, it could account for 10% of the difference in the burden of disease between affluent and low-income groups within that country. This is because poverty is always a major health hazard for the poor while, by definition, it does not affect the affluent.

It is therefore of critical importance to distinguish between social determinants of health for the overall population and the social determinants of inequities in health.

One approach to understanding the root causes (determinants) of social inequities

in health is to focus on the distinct pathways and mechanisms by which the known health risk factors and risk conditions bring about the social gradients in health that are observed within countries (Diderichsen, Evans & Whitehead, 2001). Applying and further developing Diderichsen's approach, it is possible to identify the following five mechanisms or pathways to social inequities in health within a country.

1. Different levels of power and resources

Social position in society, as defined by education, occupation or economic resources, exerts a powerful influence on the type, magnitude and distribution of health risks experienced within different socioeconomic groups. Groups that are better off typically have more power and opportunities to live a healthy life than groups that are less privileged. Social position is therefore in itself an important determinant of social inequities in health (Link & Phelan, 1996). This stratification is usually stronger when the social divisions in society are wider. It is also reflected in legal and institutional arrangements, as well as in political and market forces.

The determinants of social inequities in health generated by different levels of power and resources can only be understood and measured at the group or societal level (Diderichsen, Evans & Whitehead, 2001). Efforts to reduce differences in education or income between socioeconomic groups are likely to have a positive effect from a health equity perspective, as they increase the power of (and opportunities for) less privileged groups to avoid unhealthy living and working conditions. Education can also foster greater understanding between different groups in society, and thereby help to reduce the distance between groups, as outlined in the education section in Part II of this report.

The psychosocial effects of social position have also been given increasing attention in research on determinants of social inequities in health. Social status is then seen as a determinant of health in its own right, as expressed by Richard Wilkinson: It has "a huge impact on whether people feel valued, appreciated

and needed or on the other hand looked down on, treated as insignificant, disrespected, stigmatised and humiliated” (Wilkinson, 2005).

Empirical data show that people in a low socioeconomic position experience, on average, more psychosocial stress related to financial difficulties and effort–reward imbalances; they also experience a life or work situation (or both) characterized by high demands and low control. As Johan Mackenbach explains, these forms of psychosocial stress can in their turn lead to ill health, either through biological pathways (for example, by affecting the endocrine or immune system) or through behavioural pathways (for example, by inducing risk taking behaviour) (Mackenbach, 2005).

The point is that psychosocial determinants of health, such as lack of control in the workplace, lack of social support and housing insecurity that generates unhealthy stress, are *socially structured* – that is, related to the social position – and thus typically far more common among people with a low social position, as compared with people with a high social position.

That the roots of social inequities in health are to be found in the social context and class structure of the society does *not* imply that only changing the class structure as a whole can reduce socioeconomic differences in health. What it does imply, however, is that processes that reduce the differences between different segments of the population are likely to be good for equity in health as well.

Reducing inequities in health can be thought of as increasing the freedom and power among people with the most limited possibilities of controlling and influencing their own life and society (Dahlgren, 2003b). Political and economic democracy, as well as other systems that empower the least powerful, should therefore be considered within the context of comprehensive strategies for tackling social inequities in health. Special attention should also be given to the possibilities of increasing the influence on commercial markets of the most powerless, as essential goods and services on these markets are provided only to those who can express their need and demand in purchasing power.

2. Different levels of exposure to health hazards

The most obvious reason why the risks for most major diseases differ among socioeconomic groups is differences in exposure to the factors that cause or prevent these diseases. Exposure to almost all risk factors (material, psychosocial and behavioural) is inversely related to social position – that is, the lower the social position, the greater the exposure to different health hazards – and produces the familiar social gradient in health. Conversely, people with the greatest access to resources have the best opportunities of avoiding risks, diseases and the negative consequences of poor health (Link & Phelan, 1995). The unequal distribution of socioeconomic determinants of health, such as income, employment, education and good quality housing, should be a prime focus of strategies for reducing health inequities (Graham, 2000).

To aid the process of reducing health inequities, exposure to different risk factors should be analysed for each socioeconomic group, whenever possible. It will then become clear which risk factors are important for which group and whether these differ from the important risk factors for the overall population. For example, a French report showed that work-related risk factors accounted for 20% of all cancers (except lung cancer) among people doing manual work, but only 5% of cancers among the population as a whole (Haut Comité de la Santé Publique, 1998). The importance of improved work environments is therefore more pronounced in an equity-oriented health policy than in a policy limited to the general improvement of the population.

The impacts on equity in health of these skewed distributions are substantial across Europe, as almost all risk factors have a very pronounced inverse social gradient, including such lifestyle factors as smoking and alcohol misuse. Conversely, such healthy behaviours as breast-feeding tend to decrease with decreasing social status.

It is also important to try to understand *why* there is a social gradient in exposure to different health hazards, as well as to factors that promote and protect health.

These causes behind the causes should be identified, whenever possible, as knowledge about these driving forces is critically important for developing equity-oriented strategies for health. The focus is then likely to be on upstream financial and political power structures in a country. In the illustration above, on the increased cancer risk among French people doing manual work, a focus for an intervention might be on how to increase the power of labour unions or government authorities, to bring about reductions in cancer risks in the workplace, even when employers are reluctant to do so.

When there is a clear social gradient of a certain determinant of health, the policy implication is that special efforts and additional financial resources – as well as special methods and approaches – might be needed to reduce health hazards for those at greatest risk. This does not imply targeting these groups only, however. On the contrary, these special efforts are intended to benefit the general public and, at the same time, reduce social inequities in health. The need for such *levelling-up* policies can be illustrated by the need to reduce and eliminate occupational health hazards in all workplaces, whenever possible.

Explicit equity-oriented strategies are also needed in specific public health programmes. For example, this should be an important dimension of tobacco control programmes in countries where overall smoking rates have been declining while, at the same time, social inequities in the use of tobacco have been increasing. This comes about because the reduction in smoking has mainly occurred among high- and middle-income groups, while the prevalence of smoking has stayed the same or increased among low-income groups, particularly among low-income women in some countries. What is needed now are general tobacco control programmes that include special efforts to tackle the gender-specific determinants of the social inequities of smoke-related conditions, such as negative stress related to living and working conditions.

3. The same level of exposure leading to differential impacts

The same level of exposure to a certain risk factor may have different effects on

different socioeconomic groups. For example, in Sweden, similar levels of alcohol misuse, as measured in units of pure alcohol, cause two to three times more alcohol-related diseases and injuries among male manual workers than among male civil servants (Hemmingsson et al., 1998). This impact differential between the groups can be explained by differences in drinking patterns and social support systems at work and at home. The focus of policies to reduce social inequities in health caused by these types of impact differentials should therefore be on the social, cultural and economic environment, as well as on reducing a specific risk factor alone. This may call for social and financial support, in addition to interventions related directly to the supply of or demand for alcohol products (see the subsection on Alcohol misuse in Part II).

Impact differentials may also be due to the greater likelihood of low-income groups being exposed simultaneously to several risk factors that reinforce each other. For example, prolonged stress may increase the risk of infectious diseases, as it suppresses the body's immune system (Wilkinson, 2005). The relative risk of developing noncommunicable diseases may also increase when various risk factors are combined. The Ministry of Health in the Russia Federation has estimated that such multiple factors increase the risk of cardiovascular mortality by five to seven times (Russian Ministry of Public Health, 1997).

Understanding the causes of social inequities in health calls for an even wider perspective, as health inequities are generated by the combined effect of many factors, such as social exclusion, low income, alcohol abuse and poor access to health services.

Research on the synergetic (reinforcing) effects of different clusters of risk factors typical of low-income groups is still quite limited. The WHO Task Force on Research Priorities for Equity in Health has therefore recommended that a high priority should be given to research that focuses on the interrelationships between factors that change the likelihood of achieving or maintaining good health at the individual level and within the social context (WHO Task Force on Research Priorities for Equity in Health and the WHO Equity Team, 2005). Such reinforcing effects are believed to be found among low-income groups

exposed to a cluster of risk factors, such as economic stress due to low income, cramped housing accommodations, smoking and obesity – all occurring together. It is also very likely that the perceived possibility of *doing something* is reduced as the burden of risk factors increases.

When tackling a cluster of risk factors, a key policy issue is identifying entry points for reducing or eliminating the synergetic effects and developing *a package* of several different policies and interventions to break the vicious circle of poor health. This is a major challenge when developing and implementing community-based health programmes, such as strategies for neighbourhood renewal.

4. Life-course effects

Another important pathway to social inequity in health within a country involves a life-course perspective, considering the cumulative outcome of all the pathways above as they interact and operate over a lifetime. Many events early in life generate poor health later on, and material circumstances in early life are stronger predictors of health status later in life than social position during adulthood (Lynch, Kaplan & Salonen, 1997; Eriksson et al., 1999). Deprivation during childhood has also proved to be associated with experiences of poor health in adulthood – for example, in the CCEE and NIS (Walters & Suhrcke, 2005).

These life-course effects may be passed from parents to their children, as they are closely related to social background. For example, the social position of parents influences the educational achievements of their children, which in turn influence working conditions and salary levels when the children grow up. Specific risk factors also link the generations (Power & Matthews, 1997). For example, the fact that more working-class women smoke during pregnancy, partly explains the higher rates of low birth weight in lower socioeconomic groups, which over time increases the risk (and social inequities in health), when the babies grow up, for coronary heart disease, stroke, hypertension and non-insulin-dependent diabetes.

Chronic illness in childhood – more common among children of manual workers – may have long-term consequences for health later in life. Poor socioeconomic circumstances are also related to certain unhealthy lifestyles during adolescence, such as smoking.

Such cumulative, life-course effects are considered to be a major explanation of the variations observed in health and life expectancy for socioeconomic status (WHO, 2002). From a policy perspective, this highlights the importance of very early interventions as a key strategy for preventing the processes that increase the risk of poor health later on. Special attention should be given to parental poverty, which can start a chain of social risks that damages health over the entire life-course. Welfare policies need therefore “to provide not only safety nets but also springboards to offset earlier disadvantage” (WHO Regional Office for Europe, 2005c). These strategies for reducing childhood inequities in health should include levelling up living standards and specific health interventions for children in lower socioeconomic groups, as well as interventions aimed at improving health among children in general (Mielk, Graham & Bremberg, 2002). Reducing the intergenerational causes of poverty and increasing the possibilities for a healthy and positive childhood is one of the greatest challenges when trying to reduce social inequities in health.

5. Different social and economic effects of being sick

A fifth potential pathway to social inequities in health involves the differential social and economic consequences of being sick. Poor health may have many adverse consequences for the life and livelihood of individuals, including loss of earnings from employment, loss of a job altogether, and social isolation or exclusion, brought about by unemployment or restrictions on activities because of the illness. At the same time, sick people may face additional financial burdens due to high out-of-pocket payments for health care and the drugs they need. All of these negative consequences of being ill are likely to result in a downward spiral that damages health further.

If there is a social gradient in the severity of these consequences, with adverse socioeconomic consequences increasing with decreasing socioeconomic position, then this may eventually contribute to the observed social inequities in health. Evidence of this particular pathway has been found in both Sweden and the United Kingdom, where there are social gradients in employment rates for people with chronic illness or disability: the chances of being employed decline with declining socioeconomic position, though the adverse effects are more severe in the United Kingdom than in Sweden (Lindholm, Burström & Diderichsen, 2002; Burström et al., 2003).

Members of higher socioeconomic groups that experience health problems often have a better chance of keeping their jobs than those in lower socioeconomic groups with similar health problems (Lindholm, Burström & Diderichsen, 2002). The risk of losing income from work is therefore likely to be related inversely to initial salary. The risks of economic stress and poverty-related diseases are further increased among low socioeconomic groups, in particular in countries with inadequate financial safety nets for those unable to work due to poor health.

Policy entry points for this pathway include improved financial support systems – to ameliorate income loss due to poor health – and effective rehabilitation and

retraining programmes (Diderichsen, 2002).

Policy pointers on determinants of inequities in health

The following is advice for researchers and policy-makers.

- More research is urgently needed to deepen the understanding of the precise mechanisms by which determinants of health generate inequities in health.

- Special attention should be given to the extent to which social differences in living standards are linked to psychosocial determinants of health, which in turn – via, for example, chronic stress – cause diseases and health problems.

- A high priority should be given to research that focuses on synergetic effects of different risk factors – in particular, among low-income groups. Longitudinal cohort studies make it possible to analyse determinants of social inequities in health in a life-course perspective.

- Information on the main determinants of social inequities in health should be actively and widely distributed in a language that is easily understood by people without a professional background in epidemiology or public health. The importance of recognizing the difference between determinants of health for the overall population and determinants of social inequities within that population should be explained and emphasized.

- Methods of health impact assessment must be further developed to capture positive and negative health impacts by age, sex and social position.

- In any analysis of determinants of social inequities in health, it is important to try to assess the lead time – the period between change in exposure and health impact – to avoid missing key effects due to a too short time frame.

- Further research is essential, but enough is presently known for effective action. Even without perfect data, preventive and protective action is needed now. Strategies for reducing social inequities in health are no different from any other economic or social strategies, as they should be based on the best possible evidence, but they should also be amenable to change, as additional experiences are gained and new research findings presented.



Part B:

Policy options and experiences

Having considered the various pathways that lead to social inequities in health, this report now outlines some policy options for intervening, to tackle the problem. It is useful to take each layer of influence in the rainbow in Figure 1, focus in turn on the impact on social inequities in health, and then consider what has been learnt from previous experiences that can be used for future action. In the following four sections we take each of the four layers of the rainbow in turn in this way.

It is impossible to capture all important research findings on – and efforts made to reduce – social inequities in health since the beginning of the 1990s. Instead, the analysis in this part of the report is intended to illustrate different approaches and present policy options as illuminating examples.

Layer 1. The macro-policy environment

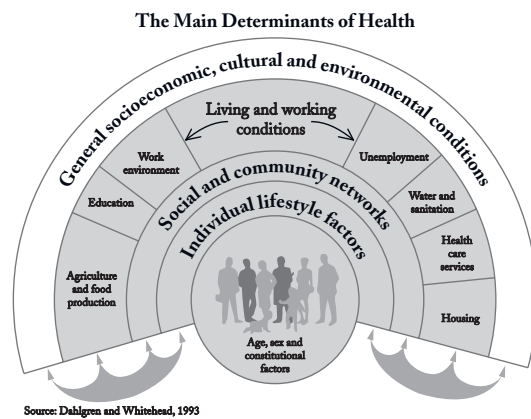
The driving forces that generate social inequities in health are, to a great extent, related to the macro-policy environment, in the outer layer of the “Rainbow” illustrated opposite. This environment includes neo-liberal economic growth strategies, which have widened income inequalities and increased poverty. The increasing globalization of national economies

has reduced the possibilities for national governments to influence these trends. At the same time, the actions of major players on the financial markets are of increasing importance – not only on these markets, but also on economic and social development in general. According to *The Economist* (2006):

“Globalisation has also shifted the balance of power in the labour market in favour of companies. It gives firms access to cheap labour abroad; and the threat that they will shift more production offshore also helps to keep the lid on wages at home. This is one reason why, despite record profits, real wages in Germany have fallen over the past two years. That in turn has depressed domestic spending and hence GDP [gross domestic product] growth. ... In other words, the old relationship between corporate and national prosperity has broken down”.

From an equity-in-health perspective, this situation calls for intensified efforts to strengthen international organizations and cooperation, focusing on how economic policies can promote human development and reduce social inequities.

Assessments of the impact of these broader *upstream* determinants of health and social inequities in health are often lacking, while the focus of assessments of the problem is generally only on the effects of interventions in specific *downstream*



determinants. Intensified efforts must therefore be made to identify and, whenever possible, quantify the effects of different economic growth strategies, income inequalities and poverty on the health of different socioeconomic groups.

A high priority should therefore be given – as recommended by a WHO task force – to research the global factors and processes that effect health equity or that constrain what countries can do to address health inequities within their own borders, or both (WHO Task Force on Research Priorities for Equity in Health and the WHO Equity Team, 2005).

I. Economic growth strategies

There is a mutual relationship between economic growth and health, as economic development can promote health and improved health can promote economic growth. The equity in health perspective is of strategic importance in both of these relationships.

Economic growth as a determinant of health

In the long term, the health of populations improves with the economic development of a country. This trend, however, varies substantially, with some countries at the same level of economic development achieving very different levels of life expectancy and child mortality. Conversely, some countries with a much lower gross national product (GNP) per person have achieved a similar health status as much richer countries (Sen, 2001). Improved health is therefore not an automatic by-product of economic development. The extent to which economic growth improves health depends largely on the political choice of development policies at local, national and international levels.

A clear distinction should therefore be made between healthy and less healthy, or even unhealthy, economic growth strategies. The positive linkages between economic growth and improved health are mainly determined by the extent to

which the economic resources generated raise the living standards of low-income groups and are invested in public systems for health and education (Anand & Ravillion, 1993). If economic growth primarily increases the income of already affluent groups and public health services are heavily underfunded, then the positive links between economic growth and improved health are reduced or even eliminated (Sen, 2001). This is then reflected in high mortality and morbidity rates among disadvantaged groups in very rich countries. The United States – one of the richest countries in the world – ranks 43rd in the world when it comes to infant mortality. If this rate were raised to the level that has been achieved in another rich country – Singapore – the lives of 18 200 American children would have been saved each year (CIA, 2006).

This discrepancy is also found in many other countries. For example, the Russian male adult mortality rates for various diseases in 2005 were substantially higher than those of countries with a similar per capita income (World Bank, 2005). The fact that life expectancies have declined in the Russian Federation despite periods of economic growth indicates that economic growth alone is inefficient from a human development perspective.

Facts such as these call for a perspective where economic growth should be seen as a *resource* for human development and not as an end in itself (Sen, 2000). This perspective seems to be increasingly emphasized, not least by researchers and policy-makers in the field of public health, in statements such as, “The true purpose of economic activity is the maximization of social welfare, not necessarily the production of goods by themselves” (Suhrcke et al., 2005). The risk of only looking at economic growth as such has also been expressed by many national and international organizations. For example, Oxfam – a United Kingdom-based international nongovernmental organization – noted that such strategies often suffer from two defects. They are “anti-poor because they ignore the critical role of income distribution in shaping opportunities for poverty reduction and they are anti-growth because extreme inequality and the poverty associated with it wastes productive potential on a vast scale” (Watkins 2000).

The predominant trend, however, is still to focus on economic growth rates as such, rather on the outcome in terms of human development, particularly among disadvantaged groups. Privatization of public services and upgrading of free markets and competition to overriding objectives have further increased this trend. Francois Mitterrand, at the 1995 Social Summit, expressed the consequences of this narrow economic growth perspective (Mitterrand, 1995):

“We have reached a point where our societies have become an appendix to the economy. ... Shall we permit the world to be transformed to a global market where the rules of the game are decided by the most powerful and the only object of society is to maximize profit as fast as possible? Do we want to live in a world where a few hours of speculation destroy the work carried out by millions of people? Are we able to develop an international order based on progress, in particular social progress?”

Rather than addressing the above issues, economic growth and equity issues are often considered separately. Proponents of this stance argue that growth should be optimized first and then possibilities to redistribute the resulting economic resources can be considered. This strategy is flawed, as the possibilities to redistribute resources in reality are usually quite limited at this late stage.

Others argue that there is a trade-off between economic growth and equity and that reductions in the income gap between different groups harm a country's economic growth. The harmonization taxes within the EU, for example, typically mean reducing taxes to the lowest common denominator, as it is assumed that increasing taxes would reduce the efficiency of the market and thus economic growth. The empirical evidence for this assertion is weak or non-existent in a European context, where countries with smaller income gaps, such as the Nordic countries, have equal or higher economic growth rates than countries with greater income inequalities (World Economic Forum, 2005). In-depth studies carried out in Sweden also clearly show that there is no empirical evidence for the statement that the level of taxation in the Swedish welfare state should have had any measurable effect on economic growth in Sweden (Palme, 2004). On the contrary, countries with universal welfare systems with high levels of income maintenance *for all* have lower poverty rates and narrower income gaps between

groups than targeted systems that provide safety nets for the poor alone (Korpi & Palme, 1998) This is obviously a finding of critical importance from an equity in health perspective.

Policy options for economic growth with equity

- Recognize economic growth explicitly as a *resource* for human development, and especially among disadvantaged groups .
- Develop *efficient economic growth strategies* that promote human development in general and in particular that reduce poverty, improve living conditions for disadvantaged groups, and increase access to high quality affordable education and health services. Conversely, *inefficient economic growth strategies* should be defined as those that increase poverty and widen income differences and that are linked to policies that reduce access to health and education.
- Develop health-adjusted measures of GNP, where the total costs of poor health are considered (in the same way as environmental effects are considered when calculating a *green GNP*).
- Define and measure developments in terms of a human development index, such as the one developed by the United Nations Development Programme (UNDP) (UNDP, 2005). Economic growth is then a resource for achieving targets such as the Millennium Development Goals, as well as the equity-oriented health targets defined in the European health for all strategy (WHO Regional Office for Europe, 1999) and by national governments.
- Stimulate research on global factors and processes that affect health equity and constrain what countries can do to address health inequities within their own borders, as recommended by the WHO Task Force on Research Priorities for Equity in Health, to carry forward the health equity policy agenda (WHO Task Force on Research Priorities for Equity in Health and the WHO Equity Team, 2005).

Improved health as a determinant of economic growth

Improved health is an important determinant of economic growth, as it increases labour productivity, labour supply, educational achievements and savings. This perspective, of seeing improved health as a factor promoting economic growth, is further reinforced by the high costs to society and business of poor health. In Britain, for example, 35 million working days were lost overall in 2004: 28 million to work-related ill health and a further 7 million to workplace injury (Health and Safety Executive, 2005). This cost the economy between £13 billion and £22 billion, and cost the affected workers between £6.3 billion to £10 billion (Health and Safety Executive, 2004).

The importance of improved health in an economic development perspective can also be illustrated for the Russian Federation, where a reduction in noncommunicable diseases and accidents to the same level as that of wealthy western European countries would correspond to socioeconomic benefits equivalent to nearly 30% of the 2002 Russian GDP (World Bank, 2005).

The links between improved health and economic growth – in particular, in low- and middle-income countries – have been studied in depth by the Commission on Macroeconomics and Health, initiated by WHO. One of the main findings in their final report was that, “Each 10% improvement in life expectancy at birth is associated with a rise in economic growth of at least 0.3 to 0.4 percentage points per year holding other growth factors constant” (WHO, 2001).

While it is important to recognize that improved health promotes economic growth, it must be stressed that health is an end objective in its own right, with economic benefits seen as a positive side-effect. If, on the other hand, human development is reduced to a tool for economic growth, then there is a risk of investments in health being guided largely by their effects on economic growth (Dahlgren, 1996). The health problems of low-income groups with a weak position in the labour market are then likely to be considered less important than the health problems experienced by professional groups, who are perceived as economically more productive. This market-value approach to health development should never be pursued in any health-equity strategy.

Strategies for reducing social inequities in health are, however, viable options for promoting economic growth. This is because improving the health of low-income groups faster than the health of high-income groups can only reduce the health divide. The risk of discriminating against weaker, less productive groups is thus eliminated and replaced by special efforts to improve health conditions for these groups. Within this context, health and economic growth improve together. Equity in health strategies should therefore be integrated into strategies for economic growth in high- as well as in middle- and low-income countries in the European Region.

II. Income inequalities and health

The health impact of income inequalities

The health impacts of inequalities in income and wealth have increasingly been recognized, not only among researchers but also among policy-makers. The EU Commissioner for Health and Consumer Protection, Markos Kyprianou, highlighted this in his speech at the EU Summit on Tackling Health Inequalities, in October 2005, by stating, “With growing inequalities in wealth have come growing inequalities in health. And in turn inequalities in population health contribute to widening disparities in wealth” (Kyprianou, 2005).

People living in wealthy countries with greater income inequalities and higher relative poverty tend to have a shorter life expectancy and higher rates of infant mortality (Wilkinson, 1992; Wennemo, 1993; Hales et al., 1999). Strong associations between changes in income distribution and life expectancy have also been found in eastern Europe (Smith & Egge, 1996; Marmot & Bobak, 2000). Different regions within the same country also show this link. For example, in both Italy and the Russian Federation, life expectancy increases with decreasing income inequality of the regions within the countries (Walberg et al., 1998; De Vogli et al., 2005). Within the United States, the most egalitarian, rather than the richest, states are the healthiest (Kennedy, Kawachi & Prothrow-Stith, 1996; Kaplan et al., 1996).

There is debate about the most likely explanation for this frequently observed strong association between population health and income inequality levels (Wagstaff & van Doorslaer, 2000). Income inequality may exert an influence on health in several different ways: through the increased burden of poverty, through psychosocial pathways and through public policy pathways.

Through the increased burden of poverty. Societies with large income inequalities tend to have a higher percentage of people living in poverty, and it is poverty that has the adverse impact on health. An analysis of the Luxembourg Income Study, for example, found a strong positive correlation between the degree of income inequality within a nation, as measured by the Gini index, and the share of children living in poverty – that is, the larger the income inequality, the larger the proportion of poor children (Raphael, 2001).

Through psychosocial pathways. Societies with large income inequalities generate more damaging stress levels throughout the population, but especially in those lower down the social scale. It is stress that results from greater anxiety, insecurity, and damaging lack of control over living and working conditions. These heightened levels of psychological stress, both directly and via subsequent risk-taking behaviour, affect health (Marmot, 2004; Mackenbach, 2005; Wilkinson, 2005).

Through public policy pathways. Here the impact on health is generated by greater income inequalities that result in more limited investments in such public programmes as health and education, which are of particular importance to low-income groups (Lynch et al., 2000). Smaller social and economic inequalities improve the possibilities of maintaining and developing welfare systems financed according to ability to pay and utilized according to need. Such systems, based on solidarity and trust, are of critical importance in any strategy for reducing social inequities in health.

Furthermore, major income inequalities within a country are also likely to increase the risk of interpersonal violence (Wilkinson, 2005). *The World Health Report 2002*, on reducing risks and promoting healthy life, also concluded that

the weight of evidence demonstrated that high levels of inequality coincide with high homicide rates and high rates of non-fatal violence among the poorest sectors of the population in industrialized countries (WHO, 2002). The effects most closely related to income inequalities are deaths due to violence, accidents and alcohol, both in eastern and western European countries (McIsaac & Wilkinson, 1997; Walberg et al., 1998).

The combined effects of these pathways make income inequalities an important policy issue from an equity-in-health perspective. Furthermore, it is also increasingly recognized that reducing inequalities in income along with economic growth accelerates the rate of poverty reduction (World Bank, 2006). Given that poverty is an important determinant of poor health in Europe, the positive health impact of reducing wide inequalities in income should be acknowledged.

Policy options for reducing income inequalities

Reducing income inequalities could include the following policy options.

- Recognize that the level of income inequality in a society is amenable to change. Income inequality, measured as the ratio of total income received by the richest 10% to that received by the poorest 10% among the 52 countries of the WHO European Region, varied greatly in 2002, from 5.2 in the Czech Republic to 15.0 in Portugal (WHO Regional Office for Europe, 2005a). These substantial differences within the European Region illustrate that the level is not fixed, and the lowest levels provide a benchmark for what can be achieved in a European setting.
- Describe present and future possibilities to reduce social inequalities in income through cash benefits, taxes and subsidized public services. The magnitude of these transfers can be illustrated by the following example from United Kingdom in 2002 (Summerfield, 2005): “Before redistribution the highest income quintile earn 15 times that of the lowest income quintile. After distribution of government cash benefits this ratio is reduced to 6 to 1, and after direct and local taxes the ratio falls further to 5 to 1. Finally, after adjustment for indirect taxes and use of certain free government services such as health and education, the highest income quintile enjoys a final income 4 times higher than the lowest income quintile”.

- Identify and tackle policies and actions that increase inequalities in income and wealth.
- Regulate the invisible hand of the market with a visible hand, promoting equity-oriented and labour-intensive growth strategies. A strong labour movement is important for promoting such policies, and it should be coupled with a broad public debate with strong links to the democratic or political decision-making process. Within this policy framework, the following special efforts should be made.
- Maintain or strengthen active wage policies, where special efforts are made to secure jobs with adequate pay for those in the weakest position in the labour market. Secure minimum wage levels through agreements or legislation that are adequate and that eliminate the risk of a population of working poor.
- Introduce or maintain progressive taxation, related both to income and to different tax credits, so that differences in net income are reduced after tax.
- Intensify efforts to eliminate gender differences in income, by securing equal pay for equal jobs – regardless of sex. Some gender differences in income are also brought about when occupations that are typically male receive greater remuneration than occupations that are seen as female, because women are concentrated in them. These differences also need to be challenged.
- Increase or maintain public financing of health, education and public transport. The distributional effects of these services are significant – in particular for health services – in universal systems financed according to ability to pay and utilized according to need
- Set national targets for the reduction of income differences.
- Monitor the magnitude and changes of income and wealth inequalities in the same way as any other important determinant of health among disadvantaged groups.

III. Poverty and health

Poverty severely limits the chance of living a healthy life and is still in some European countries a major cause of poor health (in general) and of social inequities in health (in particular). Poor health can also be a major cause of impoverishment, as it puts a heavy burden on the family budget, which can push families and individuals into poverty. Conversely, improved health can be a prerequisite for being able to capture opportunities for education and increased earning power. Training and starting up small businesses, for example, increase the possibilities to work oneself out of poverty, but poor health is a barrier to this escape route. These three different linkages between poverty and health – poverty as a cause of poor health, poor health as a cause of poverty and improved health as a way out of poverty – are described briefly below, together with some policy options for integrating health equity strategies into comprehensive strategies for reducing poverty.

Poverty as a cause of poor health

Historically and globally, poverty has been the main direct and indirect cause of poor health and of social inequities in health. The poor cannot afford to live healthy lives and may be forced to accept unhealthy jobs. This negative impact of poverty on health increases with increased market-oriented policies for essential services, such as health, education, housing, electricity, water and public transport. The poor cannot afford to pay increased fees or market prices for these services.

The differential impact of poverty across society further reinforces the negative effects of poverty on health, as increased poverty is related to increased vulnerability. Synergetic effects – that is, that the poor experience many risk factors at the same time that interact and reinforce each other – also contribute to widening inequities in health. High levels of economic stress, poor housing, unemployment, limited access to essential health services and structurally determined unhealthy lifestyles cluster together and heighten the impact on the health of exposed groups. The health impact of poverty has been quantified by

estimating the number of lives that would be saved by preventing poverty. For example, in the United Kingdom, it has been estimated that eliminating child poverty would save annually the lives of 1400 children under 15 years of age (Williams, 2004).

In spite of poverty being “the worlds biggest killer and greatest cause of ill health and suffering across the globe” (WHO, 1995), it is rarely stated as a cause of major diseases. Poverty as a cause of ill health is even marginalized in WHO’s *International classification of diseases*, where it is listed almost at the end, and given the code Z.59.5 (WHO, 1995). Rather than stating it explicitly, the tendency is to disguise the links between poverty and poor health, by using misleading terminology. Poverty-related diseases in poor countries are often referred to as *tropical diseases*, even though many of these diseases were common in the cold climate of northern European countries when they were poor. Equally misleading, in a European context, is the tendency to refer to cardiovascular diseases and diabetes as *diseases of affluence*, even though those with the highest levels of affluence within a country are those with the least risk for these diseases. Diseases that are directly or indirectly caused by absolute or relative poverty should instead be referred to as *poverty-related diseases*.

The phenomenon of excess deaths in winter has been causing growing concern in Europe. In a study of 14 EU countries, excess winter mortality was highest in Ireland, the United Kingdom and southern Europe, while Scandinavia and other northern European countries were relatively unaffected by the problem. Poor standards of thermal efficiency in housing, deprivation, and fuel poverty were strongly related to excess deaths in winter (Healy, 2003). The United Kingdom has the highest number of avoidable deaths in winter in western Europe, with about 37 000 excess deaths each winter. This is partly because they cannot afford to heat their homes, compounded by the poor thermal efficiency of British housing stock (Healy, 2003). It is likely that the problem is even greater in the CCEE and NIS, where higher poverty levels are coupled with lower winter temperatures.

Strategies for reducing poverty – with no explicit reference to health outcomes – have recently received renewed attention in Europe. For example, National Action Plans against Poverty and Social Exclusion have been developed in all 25 EU countries (Judge et al., 2005). However, WHO and its European Office for Investment for Health and Development increasingly recognize the importance of fighting poverty from an equity-in-health perspective – for example, in its work on *Health systems confront poverty* (Ziglio et al., 2003).

Although poverty is multidimensional, it is often measured in terms of income. The poverty line in a country can be defined in absolute or relative terms.

Absolute poverty is usually defined in terms of inadequate financial resources for physical survival. Definitions of national poverty lines in absolute terms differ from country to country, making international comparisons difficult. In addition, some countries set the absolute poverty line very low, to reduce the official prevalence of poverty in the population. The World Bank used a poverty line of US\$ 2.15 a day to analyse absolute poverty levels in eastern Europe and the former Soviet Union in 2003. By this definition, the new member states of the EU – the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, not including Cyprus and Malta – have low levels of poverty (less than 5%), countries in south-eastern Europe have levels of between 5% and 20%, as do the middle-income countries in the NIS. The low-income countries of the NIS, however, have extremely high levels of absolute poverty – above 40%. At the extreme end of the spectrum, Tajikistan has more than 70% of its population living on less than US\$ 2.15 a day. In the Region as a whole, more than 60 million people live in *absolute* poverty (Alam et al., 2005).

Relative poverty is defined in relation to the rest of society. Within the EU, poverty is defined as living on less than 60% of the national median income. With this definition, some 60 million people in the 15 countries that belonged to the EU before 1 May 2004 (18% of the total population) are at risk for relative poverty and social exclusion. The proportion of the population living in relative poverty varies in the EU, from less than 10% to about 20% (Judge et al., 2005). In 2005, the proportion of children living in households earning

below 60% of the national median income was about 20% for the 15 countries that belonged to the EU before 1 May 2004. However, there are substantial differences even among these high-income countries. For example, Denmark has 7% of the children living in poor households (Diderichsen, 2006). England, on the other hand, used to have a high child poverty rate, approaching 30%. A major health policy target set in 1999 aimed to halve child poverty in 10 years and abolish it by the year 2020. Progress towards this target has been made, as the percentage of children living in poor households has fallen from 24% to 20% between 1998/1999 and 2003/2004 (British Department of Health, 2005).

Although relative poverty in Europe has been at a low level, in comparison with the global situation, it grew faster in Europe and central Asia from 1990 to 1998 than anywhere else in the world. Since then, it has declined somewhat (Alam et al., 2005).

The issue of *fuel poverty* has emerged as a serious social concern in Europe since the oil crisis and associated energy price rises of the mid-1970s. Increasing numbers of households are facing large challenges in paying for the energy required to heat their homes. A person who spends more than 10% of their income on keeping themselves warm could be said to be suffering from fuel poverty. By this definition, in 2002, one million households in England were considered fuel poor, and a further one million were considered vulnerable to becoming fuel poor (DTI, 2004). The seriousness of the situation triggered the establishment of the United Kingdom Fuel Poverty Strategy (DTI, 2001). Trends in energy prices suggest that fuel poverty will be a growing problem across Europe in the future, and not just one confined to a few countries.

In addition to very limited financial resources, the concept of relative poverty can also include the notion of inability to participate in, or exclusion from, the normal social interactions in a society (Townsend, 1979).

It is essential to assess the depth, and not just the extent, of poverty – the so-called poverty gap – among those under the poverty line. This is of particular importance in an analysis of poverty as a determinant of poor health and premature deaths, as the deeper the poverty, the greater the negative health impact (Chien et al., 2002).

Policy options for addressing poverty as a cause of poor health

It is outside the scope of this report to cover all economic and social policies and actions within local, national and international poverty reduction strategies. The focus of this report is limited to the mutual links between poverty and poor health and some related key policy options. The following policy options should be considered within this focus.

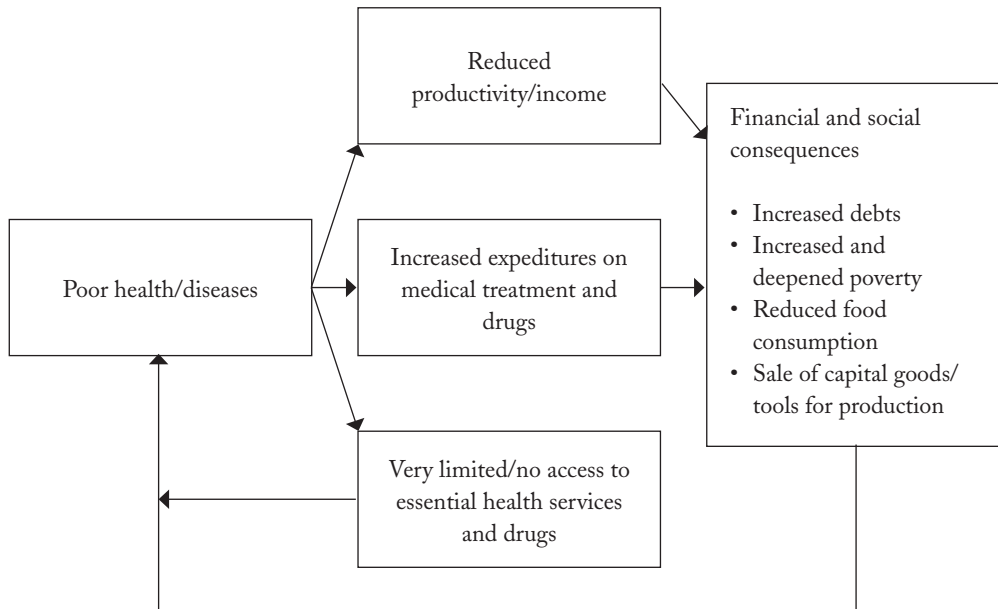
- Develop and reinforce comprehensive strategies for reducing the overall rate of poverty, and long-term poverty, in particular, taking full account of the many links between poverty and health. For example, as described below, poverty can be reduced by investments in health promotion and disease prevention, by fair financial strategies for health care, and by access to essential health services according to need, regardless of ability to pay.
- Promote gender equality, with a special focus on those experiencing the double burden of being discriminated against due both to their sex and low social position.
- Tackle child poverty by giving high priority to early medical, social and educational support to disadvantaged children and by enhancing income support and assistance to poor families and single parents.
- Boost incomes of poor families by:
 - equity-oriented economic growth and labour market policies;
 - tax credits for low-income families;
 - minimum salary levels that reduce the risk of being working poor;
 - reducing/eliminating gender-specific income differences;
 - active employment policies;
 - securing or expanding child care or preschool care, which increases the possibilities for parents to earn an income from work outside the home;
 - adult education, including life-long opportunities to learn new skills;
 - social welfare benefits, to provide an adequate income for a family to live on; and
 - old age pensions that secure a decent living standard for low-income and financially marginalized groups.
- Tackle fuel poverty by a three-pronged attack:
 - social protection measures, to increase the incomes of poor households;
 - measures to improve the thermal efficiency of housing, particularly for low-income and vulnerable households;
 - and measures to control the price of energy and improve energy conservation.

- Recognize that the possibilities of reducing poverty in high- and middle-income countries are related less to economic resources and more to political will and a sense of solidarity and trust in the society as a whole. If there is a political will then there are possibilities. The political will can be rooted in self-interest as well as in genuine solidarity. Focusing on self-interest, Amartya Sen expressed the following thoughts, *“I sometimes wonder whether there is any way of making poverty terribly infectious. If that were to happen, its general elimination would be, I am certain, remarkably rapid”* (Sen, 1995).

Poor health as a cause of poverty

Poor health is currently a major cause of poverty in many low-income countries where families have extremely limited public welfare support to help compensate income lost due to illness. At the same time, the poor have substantially increased expenditures, as they have to pay a high proportion of (or all) medical expenses out of pocket (Whitehead, Dahlgren & Evans, 2001).

The pathways from poor health may lead to reduced income, increased costs for medical care and drugs, as well as to some counterproductive coping strategies, as illustrated in Fig. 2. The ability to pay, in particular for treatment of chronic diseases, needs to take into consideration the reduction of income due to poor health and limited or no capacity to work. High out-of-pocket payments also reduce access to essential health services. This is very likely to increase social inequities in health further, even though it is difficult to quantify the health impact of not receiving professional care according to need in different socioeconomic groups. In a longer time perspective, limited economic access may even increase the burden of payment for health services and thus increase the risk of being pushed into poverty. In turn, this financial barrier to care might delay when people seek care. Treatment, when a certain disease has become more manifest and serious, is then likely not only to be more difficult than at an earlier stage of the disease but also to be more expensive, as it further increases out-of-pocket expenditures and related risks of increased financial problems and poverty.

Fig. 2. Linkages between poor health and poverty: an analytical framework

Source: Dahlgren (2003a)

Historically, breaking these links between poor health and poverty has been an important integrated part of the development process across Europe. The links have been weakened as health insurance systems have been developed to provide adequate compensation for income lost due to poor health and as public health services have been provided free or at a very low cost at the point of delivery. The positive effects of these reforms have been remarkable in many European countries, where poor health is no longer a cause of major financial problems and poverty.

This positive trend, which has promoted equity in health, is now slowly being reversed in some European countries, where financial support systems are weakening – for example, due to the requirement to pay an increasing share of medical expenses out of pocket. This shift from public to private payments for health services and drugs has, during the last 10–15 years, been typical in many eastern and south-eastern European countries. For example, the percentage of total expenditure on health paid privately in Albania, increased from 23% to

38%, between 1995 and 2000, while at the same time the share of total general government expenditures allocated to health care decreased from 7.6% to 6.7% (Walters & Suhrcke, 2005).

Such negative consequences of private financing are beginning to be recognized, stimulating a swing back towards a greater share of public funding. For example, in the Russian Federation, after an initial increase in private financing from 18.5% to 35.3%, between 1995 and 1999, the share went down to 27.5% by the year 2000 (WHO, 2002). Recent major increases in the public health budget in the Russian Federation are likely to reduce this proportion further. A comprehensive analysis of the burden of payment for health services within different socioeconomic groups and the differential access of these groups to essential health services should, however, be carried out before any definite conclusions can be drawn about these developments.

The long-term impact of high medical expenditures on poverty was summarized in the Final Report from the Commission on Macroeconomic and Health initiated by WHO (2001):

“The economic consequences of a disease episode on an individual household can be magnified if the cost of dealing with the illness forces a household to spend so much of its resources on medical care that it depletes its assets and debts are incurred. This may throw a household into poverty from which it cannot escape and which has ramifications for the welfare of all its members and often of relatives as well. ... This depletion of productive assets can lead to a poverty trap (i.e. persisting poverty) at the household level even after the acute illness is overcome since impoverished households will have a hard time re-capitalising their productive activities. ... The poverty in turn may intensify the original disease condition as well.”

The links between poor health and severe financial consequences, including poverty, have also been reinforced by the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) epidemic that has been a major cause of poverty in many low-income countries (WHO, 2002). Against this background, and from a poverty perspective, it is also alarming that the rate of development of new cases of HIV/AIDS in eastern European countries is among the highest in the world (WHO, 2002).

Policy options for tackling the medical poverty trap

- Intensify health promotion and prevention efforts – in particular, among socioeconomic groups at greatest risk.
- Monitor the distributional effects of public and private financing on health care services, day care, school lunches, services for the elderly and other essential welfare services. This type of analysis should be compulsory and should be discussed as part of the political democratic process for any major changes in financial strategies for these types of services.
- Maintain or develop public social insurance systems that compensate for income lost due to poor health. The level of compensation – usually a certain percentage of so-called normal earnings – needs to be high enough to ensure that low-income families can afford to live a healthy life.
- Promote and eventually secure a level of public funding of health services via taxes or public health insurance systems that eliminates the risk of becoming poor due to high medical expenses and that makes it possible for the whole population to have access to good quality care, regardless of ability to pay.
- Subsidize essential medicines. A major share of total family expenditures on health is out-of-pocket payments for drugs. These private expenses can be reduced by prescribing cheaper, but equally effective generic drugs, by regulating the market for drugs and by setting a financial ceiling for private payments for prescribed drugs per year above which the expenses are partly or fully paid by public funds.
- Provide advice on family budget matters, including counselling for individuals and families caught in debt traps.
- Fight corruption. Informal (under-the-table) payments for public health services constitute a major burden of payment for many low-income patients – in particular, in some CCEE and NIS countries. These payments not only increase the risk of being caught in the medical poverty trap, but they also undermine the possibility of maintaining and developing public health care systems. An expansion of compulsory health insurance systems is likely to reduce the informal payments, if linked to efforts to inform patients about their right to free or almost-free health care services at the point of delivery. Increased salaries for often extremely low-paid medical professionals, linked with strict rules and controls on informal payments, is another major policy option to be further explored in the fight against corruption.

- Progress in tackling the medical poverty trap and weakening other links between poor health and poverty should be closely monitored as an integrated part of both poverty-reduction strategies and health-sector reforms. This is of particular importance in countries with a limited social or financial (or both) safety net and commercialized health care systems with high out-of-pocket payments for services. Considering that European countries start from very different positions and with very different financial and other resources, the key issue to monitor is the direction of change.

Improved health as a way out of poverty

The greater burden of disease experienced by people living in poverty constitutes a major barrier for them, making it difficult to capture the benefits of even pro-poor economic reforms. Efforts to improve health among poor households are therefore of critical importance for breaking the vicious circle that links poverty and poor health. Improved health can make it possible to capture the opportunities created within a dynamic development process. This increases the possibilities for the poor to work themselves out of poverty (Chien et al., 2002).

These links at the household level between improved health and increased possibilities to break the vicious circle of poverty and poor health are to be found from birth to old age. Children in poor families with healthy parents are more likely to have a better start in life than children of poor parents who are experiencing mental problems or alcohol-related diseases. Also, poor children who are healthy are likely to have better results in school than poor children who are sick. Moreover, a poor, but healthy young person has a better chance to find a job when leaving school than a poor unhealthy person, and so on. Healthy people can produce more and are more productive than chronically ill people, and they are less vulnerable to external economic shocks.

The positive links between improved health in low-income groups and reduced poverty reinforces the importance of investments in health that, in particular, benefit those living at or below the poverty line. Strategies for reducing poverty that miss this health dimension of alleviating poverty are likely to be far less effective. Poor health that could be avoided, even in poor societies, limits the

positive effects of other efforts to reduce poverty. Reducing poverty and efforts to reduce social inequities in health are therefore mutually reinforcing and should be a focal point in all social and economic development policies.

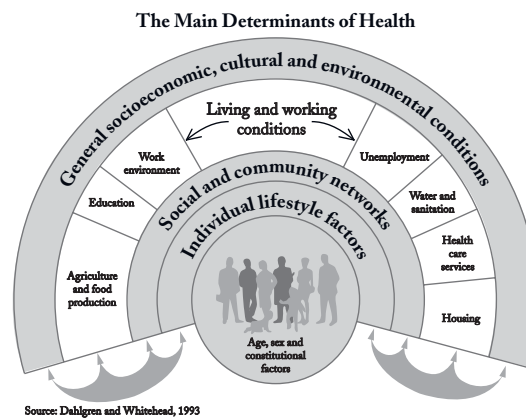
Policy options for promoting health as a route out of poverty

Promoting health as a route out of poverty could include the following policy options.

- Place investments for improving the health of those living in poverty at the very centre of any comprehensive poverty-reduction strategy. Special efforts should then be made to reduce chronic and disabling diseases, which usually have the most severe financial consequences for the poor and near poor.
- Develop and implement strategies for reducing social inequities in health as part of comprehensive strategies for promoting health and preventing diseases. Even though poverty is a major determinant of poor health, there are possibilities to improve health in spite of widespread poverty, as clearly shown by countries such as Vietnam and Sri Lanka (Chien et al., 2002).

Layer 2: Multisectoral actions to combat inequities in health

Developments in Europe over many decades have shown how population health can be improved by improvements in living and working conditions, food supply, and access to essential goods and services, such as education and health care. Actions on this layer of determinants are very important for reducing social inequities in health, as there are strong social gradients in these factors. Policies concerning these determinants, however, span several sectors, and the response needs to be equally multisectoral. This section looks at policy options in four key sectors.



I. Education

General health impact

Studies across Europe have shown a close association between education and health: the lower the educational achievement, the poorer the adult health status and vice versa (Cavelaars, Kunst & Geurts, 1998). The pathway between better education and better health may be direct – greater health knowledge may help people promote their own health and avoid health hazards, including risky behaviour. The pathway may also be indirect – through influences on the types of work open to an educated person, the greater income that they can command, and the lower levels of stress that they encounter as a result of their privileged position. In 2004, the proportion of the population 25–64 years of age with low levels of educational attainment within EU countries varied from 12% to 75% (Judge et al., 2005).

Impact on health inequities

Educational achievement is not distributed equally in society. Frequently, it is the people living under disadvantaged circumstances that have both lower educational achievement and less access to good quality educational services.

These steep educational gradients are a tragedy, also from a health perspective, because a well-functioning education system has tremendous potential for promoting health (in general) and reducing social inequities in health (in particular), as explained by the following.

Education has traditionally been an important route out of poverty for disadvantaged groups in many countries. Generally, qualifications improve people's chances of getting a job and of having better pay prospects and the resulting increase in standard of living. This in turn improves opportunities to obtain the prerequisites for health – nutritious food, safe housing, a good working environment and social participation.

Education has also been a channel for social mobility, allowing people to improve their socioeconomic position in society. At its best, it can influence the size of the social division, improving social cohesion by equalizing incomes and social conditions in the population and encouraging greater understanding between groups.

Empowerment is an important outcome of education: the role of education in encouraging participation in the community, and also in the democratic process, should not be underestimated. Improving the power of the powerless, so that they have more control over their everyday lives, gets to the heart of reducing social inequities in health. From a human rights perspective, the education system has a responsibility to ensure that every citizen, starting with the young, knows about their democratic rights and responsibilities.

The education system plays a fundamental role in preparing children for life, giving them the knowledge and skills they need to achieve their full health potential – socially, emotionally and physically.

Policy options for promoting equity in health through the education system

- Promoting equity in health through the education system includes the following policy options.
- Identify and reduce economic, social and other barriers to gaining access to education at all levels, and provide life-long learning, to increase access to education and training for disadvantaged groups.
- Introduce comprehensive support programmes for children in less privileged families, to promote preschool development. Public support is often needed if children from low-income families are to have the same chances as other children when they begin school. Randomized controlled trials of good quality day care for low-income children under 5 years of age in the United States have shown improvements in educational performance for the children receiving day care (and in some studies, the mothers of the day-care children benefited as well, from better educational and employment achievement) (Zoritch, Roberts & Oakley, 2005). Long-term benefits have been identified from some of these programmes, including the greater likelihood of continuing in school, of getting a job, of earning more and of having lower rates of teenage pregnancy. The success of this type of programme has stimulated similar initiatives in other countries, such as the Sure Start programme in the United Kingdom (Whitehead et al., 2004).
- Promote efforts to reduce social segregation within the school system. This calls for policies to reduce social segregation in general between different residential areas and also for specific policies within the educational sector to strengthen the general public school system.
- Ensure that schools in less privileged areas receive extra resources to meet the greater needs for special support to children from low-income and poor families.
- Provide extra support to students from less privileged families. The goal should be that educational achievements do not differ due to socioeconomic background.
- Prevent children from becoming early dropouts from formal education and training, by early actions and support.
- Provide extra support in the transition from school to work – in particular, for those with a weak position in the labour market.

- Develop and secure comprehensive adult-education programmes for those with very limited basic education or vocational training.
- Maintain and develop Healthy Schools programmes, with a focus on equity. This, in addition to the policy options for individual schools above, could include increased attention to (and actions on):
 - the physical and psychosocial work environment of schools, with healthy work environments in schools given at least the same attention and resources as any other work environments;
 - free healthy school lunches;
 - promotion of physical activities that also can attract obese children and that promote sound habits of everyday exercise for life;
 - improved nutritional education and cooking skills;
 - health education that takes into consideration that special efforts and approaches may be needed to reach those at greatest risk;
 - training teachers, to enable them to recognize and act on early warning signals, such as a very early smoking debut – that is, at 9–10 years of age which is known to be strongly associated with future misuse of alcohol and narcotics;
 - equity-oriented injury prevention programmes, where students, teachers and parents are engaged to secure a safe school (including safe transport and walking to the school) (Dahlgren, 1997).

II. Working environment

General health impact

Health hazards at work are still a major determinant of poor health and injuries, even though remarkable progress towards healthier workplaces can be observed in many European countries. In the 1990s, for example, work-related ill health was the fourth major contributor to the total disease burden in the 15 countries that belonged to the EU before 1 May 2004 (Diderichsen, Dahlgren & Vågerö, 1997). The proportion of the total burden of disease caused by work-related risk factors is, however, different in different countries. For the 15 countries that belonged to the EU before 1 May 2004 as a whole, for example, 3.6% of the total burden of disease was directly related to the work environment, while in Sweden it was only 2.2% (Diderichsen, Dahlgren & Vågerö, 1997). This indicates that significant possibilities still exist for reducing work-related poor health and

premature death. Major hazards include exposure to chemicals, biological agents, physical factors, adverse ergonomic conditions, allergens, different safety risks and varied psychosocial factors.

Psychosocial factors, such as work-related stress, are recognized increasingly as major health hazards. People with less control over their work tend to have higher death rates (Bosma et al., 1997; Hemingway, Kuper & Marmot, 2003; Wilkinson, 2005). Studies in eastern Europe have also shown that the balance at work between effort and reward has a significant inverse association with self-reported health and depression, as well as with alcohol consumption (Pikhart et al., 2001; Walters & Suhrcke, 2005).

Conversely, the social aspect of a working environment can constitute a very positive determinant of health. For many people, the feeling of doing something useful together with colleagues is one of the most important dimensions of life and positive health.

Impact on health inequities

Health hazards at work are often related to the socioeconomic background of those performing the work. The lower the social position, the higher the risk of having an unhealthy job. Psychosocial factors related to the organization of work play an important role in explaining socioeconomic inequities in cardiovascular diseases (Mackenbach, 2005). For example, in the British Whitehall Study of civil servants, low control of decision-making in the workplace accounted for about half of the social gradient observed in cardiovascular disease (Marmot et al., 1997a). Also, the negative effects of chemicals and other work-related health hazards are often reinforced by tobacco smoke. Intensified efforts to improve working environments overall, and the unhealthiest workplaces in particular, are of critical importance in any strategy for reducing social inequities in health.

Policy options for the work environment

Many countries have a long and successful tradition of tackling physical and chemical health hazards, while the same progress has not yet been made with psychosocial health hazards at work. It is outside the scope of this report to present strategies for reducing work-related injuries and poor health. The examples below are limited to interventions of importance from an equity-in-health perspective.

- **To remove physical health hazards at work:**
 - Intensify interventions to reduce occupation-related health problems, such as back pain. Back pain and other diseases of locomotion are major health problems with a steep social gradient. Actions against the hazards that lead to these problems include physical measures that reduce or eliminate unhealthy pushing, lifting and pulling, as well as training workers how to handle hazardous jobs and making changes in the organization of workplaces (WHO, 2002).
- **To improve psychosocial conditions:**
 - Increase the possibilities for employees to influence how the work is to be performed – in particular, at workplaces characterized by unhealthy stress.
 - Analyse the total workload at work and at home and explore possibilities to introduce more flexible working hours (without turning to insecure short-term contracts), which makes it easier to avoid unhealthy stress. This is particularly important for low-income families with small children, as their possibilities to buy time – for example, by hiring domestic services and buying ready-prepared meals – are more limited than those for families in more affluent groups. Low-income groups are also likely to have less flexible working hours and more shift work.
- **To strengthen legislation increasing the possibilities to secure a healthy workplace:**
 - Increase democracy at work and facilitate a constructive dialogue between representatives of labour unions and employers.
 - Maintain or develop special occupational health services that are financed publicly and are independent of employers. Give the highest possible priority to primary prevention, such as early warning systems for health hazards at work, including psychosocial risk factors.

- Develop or secure legal systems and regulatory frameworks that make it possible to reduce health hazards at work, even when no voluntary agreement can be reached between employer and employees.
- **To develop the workplace as a setting for health promotion:**
- The workplace can be a natural setting for a broad discussion on preventing diseases and promoting health which, in addition to addressing determinants of health directly related to the working environment, also addresses such issues as smoking, over-consumption of alcohol and the positive effects of a healthy diet and physical exercise. Special efforts should of course also be made to explore the possibilities of helping those at particular risk.
- Health care providers should be at the forefront in developing this type of equity oriented health policy within the health care sector. Surprisingly, the health care system itself displays very striking social inequities in health. At greatest risk are cleaners, porters and assistant nurses, while medical doctors and senior administrators tend to have better health and better working conditions. Systematic analysis of the main determinants of these inequities, as well as actions to reduce them, can serve a dual purpose. First, such analyses can demonstrate participation in national or local efforts to tackle social inequities in health. Second, the experiences gained from initiating the equity-in-health work within the existing systems, such as a hospital, are likely to increase the knowledge and interest for equity-oriented health policies in general.

III. Unemployment

General health impact

Unemployment causes ill health and premature death, including deterioration in mental health and the increased risk of suicide (Bartley, 1994). It has been identified as one of the ten most important contributors to the total burden of disease in the 1990s in the 15 countries that belonged to the EU before 1 May 2004 (Diderichsen, Dahlgren & Vågerö, 1997).

Levels of unemployment across the continent are high, ranging from 3% to 16% and higher, and the international trend of rising unemployment levels over the last three decades has meant that it has been an ongoing concern for most European governments (Duffy, 1998).

In the European context, work plays a central role in society: it provides the means of acquiring income, prestige and a sense of worth and provides a way of participating and being included as a full member in the life of the community. Being unemployed effectively excludes people from this participation and the benefits that employment brings. It is difficult, however, to study the relationship between unemployment and health in countries with a very large informal economy, where official unemployment rates are unlikely to be a true reflection of the realities in the labour market (Gilmore, McKee & Rose, 2002).

Unemployment can also have a negative health impact on children in households with unemployed adults. The proportion of all children living in households with unemployed adults in 2004 varied in EU countries, from 2.0% to 16.8% (Judge et al., 2005). A perceived risk of incumbent unemployment is also a source of unhealthy stress. Consequently, the increasing share of the workforce working on temporary contracts indicates – in addition to unemployment as such – an emerging determinant of poor health.

Impact on health inequities

The burden of unemployment does not fall evenly across the population. The risk of unemployment in most European countries increases with decreasing socioeconomic status and is highest in groups that are already in a weak or vulnerable position in the labour market (Duffy, 1998; Swedish Institute for Public Health, 2005). Groups at particular risk include unskilled workers, people with only a few years of schooling, low-income families, single mothers, ethnic minorities and recent immigrants (Duffy, 1998).

The main mechanisms by which unemployment damages health for these groups include: increased poverty from loss of earnings; social exclusion and the resulting isolation from social support; and changes in health-related behaviours, such as smoking, drinking and the lack of exercise brought on by stress or boredom. There can also be life-course effects, as a spell of unemployment increases the risk of unemployment in the future and damages long-term career prospects (Montgomery et al., 1996).

Policy options for unemployment and health

The negative health impact of unemployment adds to the reasons why efforts to reduce it should be given a high priority in any economic development strategy. It is outside the scope of this report to describe and analyse different policy options for promoting full employment. The point to be made here is that unemployment is an important determinant of social inequities in health, calling for such policy options as:

- Preventing unemployment from happening in the first place by:
 - adopting operational targets at national and international levels for reducing unemployment and gradually securing full employment;
 - promoting economic policies and legal frameworks that stimulate or further promote full employment, including special efforts to ensure that these policies also benefit those in the weakest position in the labour market;
 - increasing high-quality training and education opportunities for people most at risk – in particular, long-term unemployed people;
 - active labour market policies, including employment creation and maintenance; and
 - including assessments of the health impact of unemployment due to different economic policies.
- Preventing drastic reductions in income or increases in poverty among unemployed by developing or maintaining adequate financial support or unemployment benefits; and ensuring effective links between social protection, lifelong learning and labour market reforms.
- Improving pathways that lead from unemployment back to work, including active systems for job seeking, training schemes and special resources, such as subsidized wages and tax rebates for employing the long-term unemployed, the disabled, the chronically ill and unemployed youth.
- Strengthening Family Friendly Employment Policies, including the availability of child care.
- Improving the competence and capacity of the health sector to prevent the decline in health due to unemployment – for example, through outreach mental health services – and to provide adequate treatment for those suffering from the negative health impact of unemployment

IV: Health Care Services

General health impact

Across Europe, mortality has declined dramatically, while life expectancy has risen dramatically, in beginning in the late 19th century in some countries and early 20th century in others. In England and the Netherlands, which were two of the earliest countries to register this rise, life expectancy increased from about 40 years in the mid-19th century to 60 years by the mid-20th century, and to nearly 80 years by the end of the 20th century. It is difficult to assess how much of this improvement can be attributed to medical care. From trends in specific diseases and the dates when effective interventions for them became available, it seems that improved medical care played only a modest role up to the mid-20th century. Most of the improvement in England has been attributed to the general rise in living standards, to improved nutrition and to the public health sanitary reforms that brought clean water, better housing and safer working conditions (McKeown, 1976; Szreter, 1988; Guha, 1994). Mackenbach, however, has revisited the analysis for the Netherlands and estimated that medical care contributed between 4.7% and 18.5% to the decline in mortality between 1875 and 1970 (Mackenbach, 1996).

In the second half of the 20th century, medical care made a greater, though still not the major, contribution to extending life expectancy. In the Netherlands and the United States, for example, more effective health care has been estimated to have added five years to life expectancy at birth in those countries (Mackenbach, 1996).

These mortality studies, however, give only a partial picture of the total health impact of health services. Arguably, the greatest potential contribution that high-quality health services can make is in reducing morbidity and disability, relieving pain and suffering, and improving the quality of life of people who fall sick. Nearly everyone at some time in their life experiences these benefits, but the quantified health impact calculations are not available for these dimensions of health.

Impact on health inequities

Analyses of survival from diseases for which there are effective treatments have shown that all socioeconomic groups have made gains in survival in the 20th century. For such causes of death as tuberculosis, appendicitis and neonatal conditions – amenable to treatment – mortality rates in England and Wales declined, by 70% in the lowest socioeconomic groups and 80% in the highest socioeconomic groups, between 1930 and 1960. This differential decline in mortality rates resulted in a widening in the mortality gap between the groups when measured in relative terms, but the absolute differences in death rates narrowed (Mackenbach, Stronks & Kunst, 1989). A narrowing in absolute inequalities in mortality has also been reported for the Netherlands and Sweden for conditions amenable to treatment around birth. Such evidence led Johan Mackenbach to conclude that health care has played an important part in reducing inequities in health: “The introduction of effective medical care, aided by perhaps not a perfect but a nonetheless very considerable degree of access to health care for the lower socio-economic groups, has caused mortality differences to narrow, at least in absolute terms” (Mackenbach, 2003:527).

The continued existence of inequities in access to health care – found even in the most advanced welfare systems in Europe – therefore emphasizes the human rights aspect of the issue (Whitehead & Dahlgren, 2007). Having access to effective health care denied or limited when needed is a denial of human rights in a civilized society.

This right to essential health services, according to need and regardless of ability to pay, is also expressed as a main objective in many policy documents and declarations made across Europe. The health ministers of Belgium, Germany, Portugal, Spain, Sweden and the United Kingdom expressed these objectives in the following words in a joint communiqué, in August 2005 (Judge et al., 2005:17):

“The fundamental values of equity, universality and solidarity underpin health systems throughout Europe. All our systems, although they vary greatly in how they

are organised, managed and financed, seek to provide equity of access to high quality, efficient and financially sustainable health care services to the entire population, based on need rather than ability to pay. All systems are based on solidarity – between ill and healthy, between poor and rich, between young and old and between those who live in urban and rural areas”.

The commitment to these values is very strong, as emphasized by the WHO Regional Office for Europe (2005c).

“There is hardly any country in the WHO European Region where it would be acceptable or expedient for a national health authority to declare that it did not stand for justice, equity, solidarity and widespread participation, or to take actions that imperilled these values. Nor does any European society conceive of health and health services as standard market commodities that can be privatized for profit”.

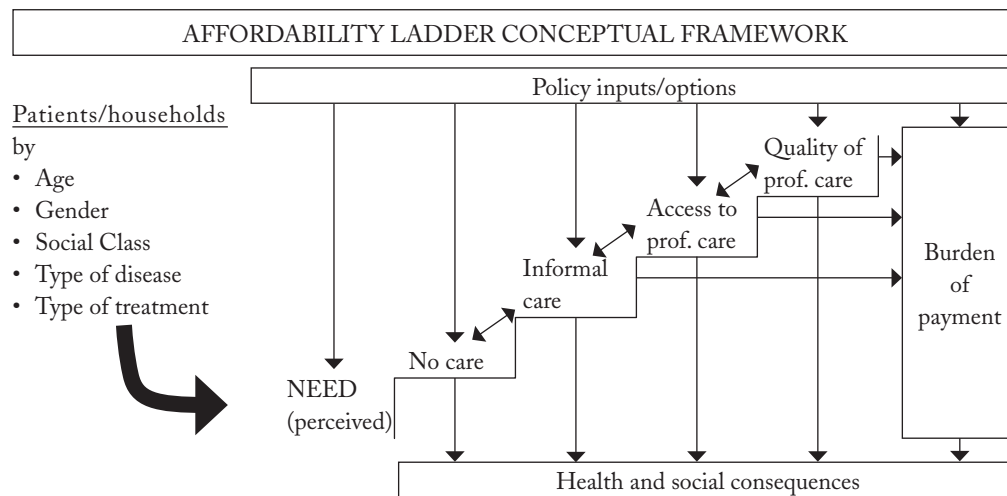
The actual experience of low-income households across Europe, however, is often far from objectives such as these. The inverse care law – “the availability of good medical care tends to vary inversely with the need for it in the population served” (Hart, 1971) – is still evident in most countries in the European Region. Furthermore, the situation has worsened in some countries since the beginning of the 1990s. Inequities in access to high-quality, affordable health services and drugs have generally increased in central and eastern European countries, in particular, but this can also be seen in western Europe. This negative trend is even seen during periods of high economic growth.

These social inequities within health systems have many dimensions, which are related to the informal health care system and access to, and quality and affordability of, professional health services and drugs. The magnitude of inequities observed can also be very different for different types of care. These inequities can be fully observed and understood from a user or household perspective only, as the following illustrates.

Equity assessments of health service systems

Equity assessments of health systems are needed as a first step towards addressing these social inequities. When making an assessment, it is important not only to consider access of the population as a whole, but also to consider the experiences of low-income groups when they seek care for different types of health problems. Also, attention needs to be paid to the burden of payment generated by fees, other direct payments for public health services and drugs, and unofficial fees and payments to commercial health services selling their services at market prices. The Affordability Ladder Program (ALPS) approach, presented in Fig. 3, can facilitate such an assessment. It advocates a systematic, equity-oriented and patient- or household-based analysis of the total health service system, including informal and formal health care (Dahlgren, 2004).

Fig. 3. The ALPS approach to assessing equity and health systems



Source: Dahlgren (2004)

Using the logic and steps of this framework, the approach can be illustrated with the following European examples.

Step 1. Considering differences in need for care

Social inequities in health by gender. These constitute the basis of any analysis of access and utilization of health services. Equity of health services implies that the higher burden of disease among low-income groups should be fully reflected in a higher utilization of essential health services. If the same level of utilization of health services is found for all socioeconomic groups, this may indicate significant social inequities in access and utilization. Notice should be taken of the social pattern of disease, as this indicates how the underlying need for the services will vary. This link between social inequities in health status and inequities in health care is often neglected in assessments of health care systems.

Type of health problem and services needed. Economic access to a given health care system may vary, depending not only on differences in financial resources of patients, but depending also on the cost of the specific treatment needed for a particular disease or health problem. This may appear self-evident, but typical analyses of access to services do not take into account differences in the costs of treating different diseases. They average out the costs of care. In reality, however, access to certain low-cost treatments may be available for almost the whole population, while expensive high-technology treatments are only available for very affluent groups. Given that all patients seek access to medical services for their special health problem, it is important that analyses of the equity of access to and utilization of health systems also trace differences in access for different types of health problems and treatments. This type of disease-specific analysis is still rare in most European countries.

Step 2. Informal care or self care

When ill, most care is provided without any contact with a professional provider of health services. This informal care, performed as self-care or by family members and friends, is rarely mentioned in analyses of health care systems. This is so despite the fact that the capacity to provide this type of care is often most limited among low-income groups with the greatest burden of disease. Assessments of access should always consider whether forced or unhealthy informal care is

occurring as a consequence of access being limited to the available professional care.

Step 3. Access to health care

Geographic access. The typical pattern in most - if not all - countries is that the number of health facilities and doctors increase with the average income of geographical areas to be served. This trend is typically reinforced in market oriented health care systems with many private for profit providers.

Economic access. Financial barriers limit access to care in many countries. For example, in Armenia, Georgia and the Republic of Moldova, over 50% of the population do not seek care when ill, due to the inability to pay. In Kyrgyzstan, 36% of the population as a whole and 70% of the poorest group reported that they could not afford to purchase prescribed drugs (Walters & Suhrcke, 2005). Equally substantial inequities in access to care and essential drugs have also been recorded in Tajikistan, where 70% of the poorest fifth of the population could not afford to buy prescribed drugs (Falkingham, 2004).

In many countries in the WHO European Region, inequities in economic access to essential health services are increasing. Women in Tajikistan, for example, are increasingly giving birth at home rather than in a medical facility, because they cannot afford the services offered by the hospital (Falkingham, 2004). Affluent groups tend to use public hospitals more than less privileged groups in many countries, even though their need for care is less than that among lower socioeconomic groups. For example, rich people in Tajikistan and Kazakhstan utilize public hospitals twice as much as do poor people (Falkingham, 2001).

Limited economic access to health services and essential drugs is also a growing problem in western European countries, as an increasing proportion of total health care costs is paid out of pocket. For example, a quarter of a million Swedes reported that they could not afford to purchase prescribed medicine (National Board of Health and Welfare, 2002). Recent in-depth studies on access to prescribed drugs revealed that 60% of those with economic problems did not

buy the drugs prescribed by doctors. In addition, 27% of men and 28% of women with economic problems did not seek professional care, despite the perceived need for such care, compared with 10% among those without economic problems (Wamala et al., 2006).

A 2005 report by the WHO European Office for Investment for Health and Development concluded that financial barriers were the most important limiting factor in health care accessibility in the CCEE and NIS and that the situation has deteriorated since the transition to a market economy. This trend has been reinforced by reduced state funding for health services, low salaries for medical personnel, and high informal and formal payments for health services and drugs (Walters & Suhrcke, 2005).

Step 4. Quality of care

In many countries, there are substantial social inequities in the quality of care provided. Poor people in Bulgaria, particularly poor women, have poorer quality primary care (Balanbanova & McKee, 2002). In Tajikistan, less privileged groups are less likely to progress beyond primary care services than are more affluent groups, which may be one indicator of poorer access to the more specialized care that they need (Falkingham 2004).

Step 5. Burden of payment

Out-of-pocket payments can cause a major burden – in particular, among low-income groups – and may even push people into poverty. This, therefore, is an important aspect of the health system to assess from an equity perspective. If the assessment shows out-of-pocket payments to be low, it does not necessarily indicate that all is well. The low burden could be because poorer groups cannot use the services at all, because of the costs. In this case, they would not be incurring medical expenditure, but they may be suffering because of lack of adequate care. To distinguish between these two causes of low out-of-pocket payments, both the burden of payment for people who do use health services and the extent to which different socioeconomic groups do not use health services because of the cost need to be analysed.

To assess when a certain level of health care expenditure is unaffordable, it is useful to express the costs as a percentage of the available household budget or income of the patient. This type of analysis by socioeconomic group in Kazakhstan revealed that poor patients in need of hospital care spent the equivalent of more than double their monthly income for this care. Affluent patients spent the equivalent of just over half their monthly income, which still represents a heavy burden (Lewis, 2000). As hospital care is infrequent, it is important to analyse total out-of-pocket payments for primary care and drugs, as well as inpatient care.

In an analysis of the burden of payment, assessments need to be made of the extent to which different socioeconomic groups benefit from existing public subsidies. The typical pattern in many countries is that most of these benefits are captured by groups of people who are better off. This, for example, is the situation in Armenia, where the poorest fifth of the population benefited from (used) only 13% of total public expenditures, while the richest fifth used nearly 40% (World Bank, 2002).

A special problem in many CCEE and NIS countries is the very high levels of unregulated, informal (under-the-table) fees, which add to the official payments paid by the patients. This type of payment is like a cancer in any public health care system, as it transfers the benefits of public financing from patients to providers and makes private expenditures for public services increasingly similar to the costs for commercial services. Against this background, it is a major problem from both an individual and societal perspective that most patients in many countries are forced to pay these informal fees. The percentage of patients paying informal fees is 91% in Armenia and 78% in Azerbaijan. The median cost of under-the-table payments in Bulgaria was equivalent to 21% of the minimum monthly salary (Balabanova & McKee, 2002). The problem appears to be increasing in many countries. In Albania, for example, the percentage of people paying under-the-table fees increased from 20% in 1996 to over 80% by the year 2000 (Lewis, 2000). The impact on inequities in health of limited access, low quality and a substantial financial burden of payment has not yet been estimated in these countries. There are, however, good reasons to believe that the negative effects of poor health and premature deaths are substantial in many CCEE and NIS countries.

Inequities in public systems are even greater where there is a large commercial health care system, providing services only to those who can pay the market price for these services. There are thus special reasons to analyse in depth the impact on social inequities in health and health care of health care reforms that promote the role of private-for-profit (commercial) health services.

Although these inequities are far more pronounced in the CCEE and NIS, similar problems of a lower magnitude are found in western Europe, with a similar trend of increasing out-of-pocket payments. For example, out-of-pocket payments and other direct private payments for health services and drugs have increased from 10 to 16% of total health expenditures during the 1990s in Sweden. A quarter of a million Swedish people a year report that they could not afford to purchase prescribed medicines (National Board of Health and Welfare, 2002).

Equity oriented health care policies

A 2001 resolution, passed by all 52 health ministers in Europe, charged the WHO European Office for Investment for Health and Development in Venice with the task of analysing and disseminating evidence on what health care systems can do to reduce the effects of poverty and inequity on health. To that end, the Venice Office has been promoting the following four-pronged approach for health systems (Ziglio et al., 2003).

1. Confront the inverse care law (found in all European countries), in which “the availability of good medical care tends to vary inversely with the need for it in the population served” (Hart, 1971) – for example, by improving coverage, eligibility, geographic and cultural access, and equitable resource allocation.
2. Prevent health services from causing poverty – for example, by attention to financing and burden of payment.
3. Help alleviate the health damage caused by wider determinants of health – for example, by providing outreach services to the homeless and other hard to reach people living in poverty.

4. Tackle the wider determinants of health more directly – for example, by providing intensified outreach services through partnerships formed with agencies outside the health sector.

The need for and possibility of developing this four-pronged approach are very different in high-, middle- and low-income countries within the European Region. Also, health sector reforms can only start with, and be based on, existing health care systems, which differ greatly across Europe. Consequently, specific strategies for reducing social inequities within the health care system can only be developed in a country-specific context. The following general questions, policy options and experiences should however be considered when developing efficient, equity-oriented health sector reforms for a specific country.

Strengthen good informal care or self-care: A neglected, but legitimate, role of public policy-making is to help strengthen the possibilities of providing good informal care or self-care – in particular, among low-income families. This could include public support to improve health literacy and services that provide respite for family members who provide informal care for sick children or elderly relatives. Some countries have also embarked on other strategies to improve the skills and quality of informal providers. A major responsibility for those formulating and implementing health and health care policies is to analyse if and to what extent different health sector reforms and health policies reduce or increase forced or unhealthy informal care, or both.

Promote multisectoral perspectives: The health care sector is one of many determinants of health. This multisectoral perspective on health development is seldom fully recognized among those working in the health sector. The health sector may even be seen as the most important determinant of health without analysing the importance of other determinants. This narrow view of health development limits the possibilities to develop multisectoral equity-oriented strategies for health. It is therefore important to widen the perspective and actively stimulate dialogue and collaboration with other sectors, which may include:

- information about causes, magnitude and distribution of different health problems that are of importance for improving efforts within each sector to prevent diseases and promote health;
- development and use of different methods for equity-oriented health impact analyses;
- multisectoral actions for health, where representatives from different sectors work together in planning and implementing equity-oriented health-related projects and programmes; and
- multisectoral collaboration, to facilitate the provision of services to marginalized, difficult-to-reach groups, such as the homeless and certain ethnic minorities.
- Emphasize that public health services should not be defined as a commodity on a commercial market. Experiences across the globe clearly illustrate that equity within health care systems cannot be achieved on a commercial market. It is therefore crucial to exclude publicly financed health services from general free trade agreements promoted by the World Trade Organization and within the EU.

Promote tax policies that secure adequate public funding: It is possible to allocate public funds according to need, regardless of ability to pay, whereas private payments to commercial providers cannot be allocated in this way. Consequently, attempts to reduce inequities in health care need systems with a large share of public funding. Policy-makers within the health sector therefore need to engage in analyses of alternative tax policies. In addition to national tax policies, it is also important to consider the possibility of developing international tax systems, such as taxes on financial transfers, air transport and efforts to limit tax evasion to tax havens abroad. It is outside the scope of this report to present and analyse national and international tax-policy options. The point to be made is that such analyses are of critical importance when globalization reduces the ability of national governments to raise adequate tax funds from national sources.

Develop or maintain public prepayment system: In countries that finance health services mainly through taxes or different types of public health insurance systems, or both, a major challenge is to ensure that these financial strategies are not undermined by reductions in public funding, increased user fees or private health insurance schemes, or both. Furthermore, it is crucial that available public resources are allocated according to need, regardless of ability to pay.

Private-for-profit providers of publicly financed health services may also undermine public financing. These commercial providers have a vested interest in giving priority to patients paying privately, as they tend to be more profitable than publicly financed patients. “It is against this background that the Swedish Parliament 2005 introduced a law that made it illegal for publicly financed hospitals to accept private patients that paid out-of-pocket or via private health insurance. This law was however removed in 2007 (after the majority parties in parliament shifted from “left” towards “right”).

In countries where formal and informal private payments for health services (including dental care) and drugs constitute a large and often increasing share of total health care costs, the only viable option to reduce inequities in care is a gradual shift towards public prepayment schemes. This was also the conclusion enshrined in resolution WHA 58/33 adopted in 2005 by the World Health Assembly. A gradual approach, where high user fees are replaced by public funds via taxes or public health insurance schemes, or both may include:

- increased public funding for improving the capacity and quality of the existing public health care system – in particular, for treating poverty-related diseases;
- tax-financed health insurance cards provided free or at a marginal cost to poor people or families and children;
- development of employer-based health insurance schemes that include family members;
- exploration of the potential to link existing public health insurance schemes, to facilitate cross subsidies between different schemes; and
- development of compulsory subsidized health insurance schemes that, together with other already established health insurance schemes, can achieve universal coverage.

It is outside the scope of this report to describe and analyse country-specific options for gradually achieving full coverage. From an equity-in-health and health care perspective, however, experience clearly indicates that voluntary health insurance schemes, and private-for-profit health insurance schemes, in particular, fail to serve those with the greatest need for care. They also undermine the possibility of developing compulsory public health insurance schemes, in which groups of people who are better off subsidize the care of economically less privileged groups.

Develop ways of allocating resources according to need: Resources can be allocated between different administrative areas by using a specific needs-based index, which takes into consideration not only population size and age structure but also takes into consideration social inequities in health status. The transformation towards a needs-based resource allocation must be gradual, due to existing physical structures and other constraints.

Only public funds can be allocated according to need in this way. Private payments out of pocket or via private health insurance schemes cannot be redistributed to those unable to pay. Official user fees can, in theory, be transferred from rich to poor areas, but this is very rarely done in practice. Payments to commercial providers should however be considered when a country decides on criteria for a needs-based allocation of funds. It might also be appropriate – in particular, in countries with high user fees – to take into consideration revenue from user fees, as they are usually higher in areas that are better off.

A shift towards a needs-based allocation of resources is of particular importance in countries still using the number of hospital beds as the criterion for resource allocation. An allocation based on beds reinforces existing geographical inequalities and blocks opportunities to develop an efficient equity-oriented health care system.

Limit the brain drain: A major problem in some low- and middle- income countries is that qualified medical personnel are offered better pay and other

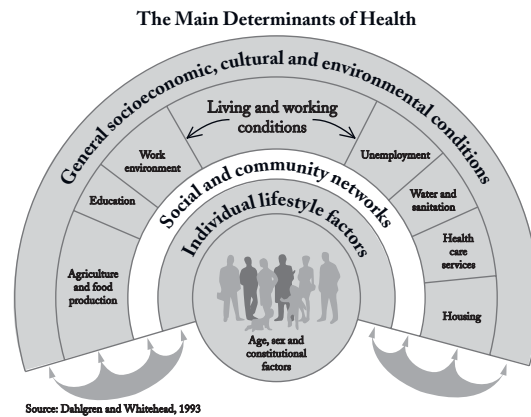
benefits abroad and therefore leave their own country. The same type of brain drain exists from the public to the commercial health sector within countries. This widens inequities within the health system, as commercial providers serve mainly groups that are better off and cannot meet the needs for expensive care among poor people. There is little ability to limit this type of brain drain within a country, and it is rarely discussed. It is therefore important to analyse if, and to what extent, an expanding commercial health sector limits the possibilities to maintain and develop public health services in low-income areas and for low-income patients.

Reduce the burden of payment: The burden of payment in market-oriented health care systems is greatest among low-income groups, despite their having the lowest capacity to pay and the highest need for care. The way to reduce this burden of payment is to develop fair financial strategies based on public prepayment schemes, as described previously. These schemes should also include subsidies for essential drugs, as expenditures on drugs often constitute a major part of a family's health care expenditures. Stricter control of drug prices, increased use of generics, and possibilities to get low interest loans to pay for health services (including dental care) and drugs can be other viable options for reducing the burden of payment. The possibilities of financing health care services should therefore always be presented and analysed from both a government and a user perspective.

Monitor inequities within the health care system: The different types of inequities within the health care system should be closely monitored and reported, not only to professionals and politicians but also to the general public. Special efforts should also be made to develop a *health care watch*. This could show if, and to what extent, different sector reforms and policies contribute to reducing barriers and other problems experienced by people (in general) and low-income groups (in particular).

Layer 3: Social and community inclusion policies

Over the past decade, interest has heightened in the third layer of the Rainbow – social and community relationships – as determinants of overall population health and of health inequities within countries in particular. Part of this field – the evidence on what is variously termed the *psychosocial environment theory*, *social capital* and *social cohesion* – has been hotly debated, becoming something of a minefield (Lynch et al., 2000; Marmot & Wilkinson, 2001; Whitehead & Diderichsen, 2001).

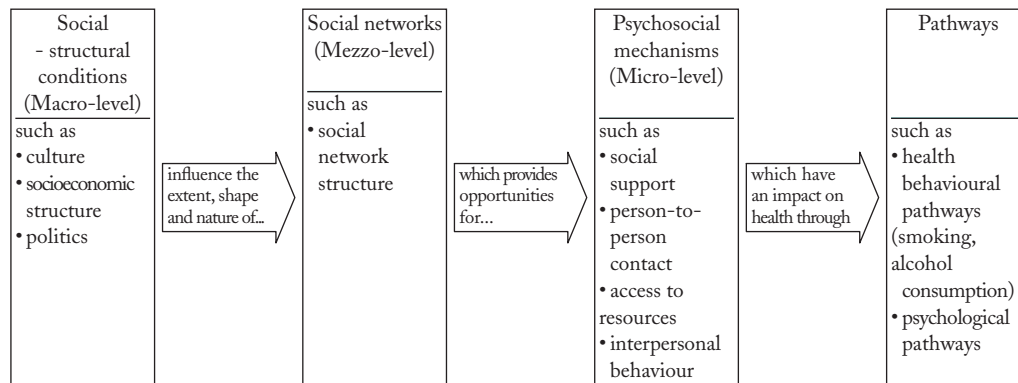


Without entering into the finer details of the debate, we outline here some key distinctions that need to be borne in mind when thinking about the most effective policy options for equity in health related to this layer of influence.

Social networks in context

Berkman & Glass (2000) sum up the body of evidence on this layer of influence, “The nature of human relationships – the degree to which an individual is interconnected and embedded in a community – is vital to an individual’s health and well-being as well as to the health and vitality of entire populations.” They propose a conceptual model that envisages social networks embedded in the upstream social and cultural context that conditions the extent, nature and shape of the networks. The network structure and function, in turn, influence downstream social support, engagement, access to resources, and social and interpersonal behaviour, which are depicted in **Fig. 4**.

Figure 4: Berkman and Glass's conceptual framework of how social networks have an impact on health



Source: Adapted from Berkman & Glass (2000)

The model helps suggest potential policy entry points along the pathways from macro- to micro-level. First, however, the general health as well as the health inequity perspective needs to be discerned.

General health impact

A distinction needs to be made between individual- and population-level impacts on health. At an individual level, there is strong evidence that certain types of social networks, social participation and supportive social relationships are good for a person's health. People with strong social networks, for instance, have mortality that is half or a third that of people with weak social links (House, Landis & Umberson, 1988; Berkman, 1995). Conversely, people who are disconnected or isolated from others are at increased risk of premature death (Berkman & Glass, 2000). A low level of control at work and a low level of social support are predictors of coronary heart disease and poor mental health (Bosma et al., 1997; Hemingway, Kuper & Marmot, 2003).

At the population level, there are features of the collective social context (such as the neighbourhood, community and society), *external to the individual*, that influence the level of health experienced in that population. Large income

inequality within states of the United States (Kawachi et al., 1997; Kawachi, Kennedy & Glass, 1999) and among other high-income countries (Wilkinson, 1996) is associated with poorer levels of self-rated health and mortality in those populations. Some researchers have found associations between levels of interpersonal trust, willingness to help one another, and density of group membership, on the one hand, and better levels of population health, on the other (Kawachi, Kennedy & Glass, 1999). Other researchers have failed to find such an association when applied to differences between high-income countries, but have found better child mortality profiles for countries that had greater trade union membership and political representation by women (Lynch et al., 2001), indicative of the wider cultural and political context in which people live.

Impact on inequities in health

At the individual level, there is a clear social gradient in exposure to poorer social support, social isolation and a low-level of control at work, with increasing exposure corresponding to declining social position (Colhoun & Prescott-Clarke, 1996). Being unemployed or living in poverty brings increased risks of social exclusion. In the British Whitehall Study of civil servants, a low level of control in the workplace accounted for about half of the observed social gradient in cardiovascular disease (Marmot et al., 1997a).

At the population level, countries with more cohesive welfare systems tend to promote more inclusive political participation, which results in the passage of policies that benefit all sections of society. These more universal systems, in turn, produce less inequity and lower poverty rates (Korpi & Palme, 1998). The converse of this – targeted services for the poor only – runs the risk of becoming poor service, as the British social scientist Richard Titmuss once famously commented.

The quality of social relations also tends to be poorer among low-income groups. Family life is likely to be more stressed for many families who have to cope with all the difficulties typical of people who live in relative poverty (Wilkinson, 2005).

Policy options on social and community inclusion

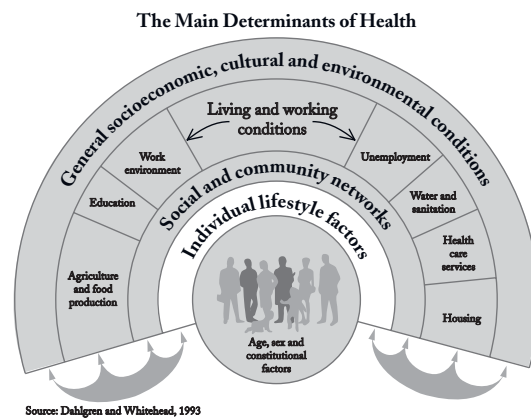
Policy options fall into three main categories – bolstering individual social support, and promoting horizontal and vertical interactions in populations – as follows.

- Provide additional health and social services to disadvantaged groups and communities that offer emotional support to parents of young children and young mothers (Acheson et al., 1998).
- Foster *horizontal* social interactions – that is, between members of the same community or group – to allow community dynamics to work. These options range from:
 - initiating community development initiatives that enable people to work collectively on their identified priorities for health to;
 - building up the infrastructure in neighbourhoods – creating relaxing meeting places and facilities, for instance – to make it easier for social interaction to take place.
- Strengthen or develop systems that foster *vertical* social interactions on a society-wide basis. These are aimed at creating vertical bonds between different groups from the top of the social scale to its bottom, to build inclusiveness and full economic and political participation. The underlying theory behind the vertical initiatives is that fostering solidarity throughout society produces a less divided society, one with smaller social inequities and hence more equitable access to the resources for health. Examples include the following:
 - building inclusive social welfare and educational systems in which *everyone contributes and everyone benefits*;
 - employment policies that aim to integrate all groups in society into the labour market; and
 - initiatives to strengthen the democratic process and make it easier for the disenfranchised to participate in it.

Layer 4: Lifestyle-related policies through an equity lens

Personal behaviours, such as smoking, drinking, diet and exercise, all influence population health and are socially patterned, contributing to some of the observed social inequities in health. Before strategies can be devised for reducing social inequities in lifestyle-related health, however, the reasons why lifestyle is socially patterned need to be understood.

This section takes three key lifestyle-related factors and examines policy options for them through an equity lens.



Structurally determined and individually chosen lifestyles

Lifestyle-related risk factors, such as smoking tobacco, misuse of alcohol, obesity, high blood pressure and high cholesterol level are implicated in at least a third of the total burden of disease in Europe (WHO, 2002). Behavioural risk factors, such as smoking and alcohol misuse, are sometimes portrayed as freely chosen and, therefore, as social differences in lifestyles attributable to unhealthy individual choices. The obvious strategy to reduce these lifestyle-related risk factors is to inform people about the negative effects on health of different risk factors, so that they are motivated to change their lifestyle – that is, make a healthier choice.

The assumption that the lifestyles of different socioeconomic groups are freely chosen is, however, flawed, as the social and economic environments in which people live are of critical importance for shaping their lifestyles (Stronks et al., 1996; Jarvis & Wardle, 1999). Recognizing these structurally determined lifestyles highlights the importance of structural interventions in reducing social

inequities in diseases related to lifestyle factors. Such interventions include fiscal policies that increase prices of harmful goods and legislation that limits access to these products. Equally important is the option of promoting healthier lifestyles, by making it easier to choose the healthy alternatives – for example, by public subsidies and increased access to healthy food and recreational facilities.

The importance of such structural interventions as these may be far greater among low-income groups than among high-income groups. This further reinforces the importance of a combined structural and health education approach for improving population health overall and reducing social inequities in health in particular.

I. Tobacco control

General health impact

Smoking increases the risk of mortality from lung cancer and many other cancers, heart disease, stroke, and chronic respiratory diseases. Smoking is still the greatest behavioural risk factor across Europe, even though the prevalence of daily smokers in most west European countries decreased substantially between 1990 and 2005. Smoking kills over a million men and over 200 000 women in the WHO European Region annually (Peto et al., 2004). Smoking rates among men are still very high in the CCEE and NIS. The Russian Federation has one of the highest rates in the world: 61% of Russian men were smokers in 2004. The rate for females is lower, but it increased from 9% in 1992 to 15% in 2004 (Walters & Suhrcke, 2005).

The health impact of passive smoking is far greater than generally assumed. More people in Sweden (which has one of the lowest rates of smoking of all European countries) are killed each year by passive smoking than are killed in traffic accidents (National Board of Health and Social Welfare, 2001). Exposure to environmental tobacco smoke has been associated with lower respiratory tract infections, sudden infant deaths, asthma, ischaemic heart disease and different

types of cancer. In addition maternal smoking during pregnancy increases the risk of low birth weight and sudden infant death syndrome (WHO, 2002).

The economic costs of smoking are also very high. For example, a study in Hungary estimated that these tobacco-related costs represented a loss of 3.2% of GDP in 1998 (Szilágyi, 2004). The corresponding costs in Germany were estimated to be 2% of GDP in 1993 (Welte, König & Leidel, 2000). The total cost due to smoking in the EU has been estimated to be between €97 billion and €130 billion in 2000, which corresponds to between €211 and €281 per person and over 1% of the Region's GDP (Ross, 2004).

Impact on inequities in health

The European smoking epidemic has followed a common trend. Initially, most smokers are found among more affluent men and then, with some delay, also women in this socioeconomic group. The second phase of the tobacco epidemic is characterized by a decline in smoking among affluent groups and an increase in low-income groups, again first among men and then among women. During the third phase, smoking declines in all socioeconomic groups, but this decline is much faster among high- and middle-income groups than among low-income groups. The rate of smoking among low-income women may even increase or remain the same during this phase (Graham, 1996). Northern European countries have reached this third phase in the class-differentiated diffusion of smoking, while southern European countries are generally at an earlier phase.

In the central and eastern parts of Europe, there is a consistent pattern among men of an inverse association between socioeconomic status and smoking, but the pattern among women is less clear (Walters & Suhrcke, 2005). For example, in the Russian Federation, in 1998, smoking rates among men with a lower level of education were double those of men with a higher level of education (Carlson, 2001). In Ukraine, the smoking rate among unemployed men was 50% higher than among men who were employed. Even larger differences were found among Ukrainian women, where the smoking rate among unemployed women was double the rate among employed women (Gilmore et al., 2001).

The overall reduction in smoking in Europe is a major public health success story and has been greatly facilitated by progressive tobacco control policies, which include both health education and structural policies, such as high taxes on tobacco. The effect, however, has been far less successful from an *equity-in-health* perspective, as the main positive effects have been achieved among middle- and high-income groups, resulting in a substantial widening of social inequities in health. In such countries as the United Kingdom, the social differentials in smoking now explain, statistically, much of the observed differences, between different social classes, in mortality from lung cancer and coronary heart disease, as well as the widening differentials in mortality among middle-aged men over the past 20 years (Jarvis & Wardle, 1999).

The equity dimension of passive smoking is also likely to be quite pronounced – in particular, among children – given the social gradient in smoking and the fact that people still smoke indoors at home. High rates of smoking among pregnant working class women are also affecting the rate at which children in different social classes experience the negative effects of passive smoking, even before they are born. Specific occupational groups – for example, people working in restaurants and bars – are not only more likely to smoke but are also far more likely than other occupational groups to be exposed to smoky environments.

Smoking is therefore a major determinant of social inequities in health across the European Region. In the EU, about a third of the differences in mortality rates between the rich and the poor are due to differences in smoking (Kyprianou, 2005).

Policy options for equity-oriented tobacco control

The Framework Convention on Tobacco Control adopted by the World Health Assembly in May 2003, which came into force in February 2005, is a major step forward in the global recognition that strong and intensified efforts are needed on advertising and taxation to reduce smoking. The balance between investments and efforts made by the tobacco industry to promote the use of tobacco and international and national public health policies to reduce smoking is, however (even from a European perspective), still in favour of the unhealthy policies driven by commercial interests. Within such a framework on tobacco control, in general, the following policy options are of particular importance from an equity perspective.

- Formulate tobacco-control targets that specify desired changes by socioeconomic group and gender. The targets for tobacco-control policies and programmes are at present usually expressed as reduced tobacco consumption in the population as a whole. Specific equity-oriented targets for higher-than-average reductions in smoking among low-income groups and reductions in social inequities in tobacco-related diseases should now be added. These two types of equity targets are also important in countries at an earlier stage of the tobacco epidemic, to avoid the negative trends of increased inequities as tobacco-control policies reduce the share of smokers in the population as a whole.
- Keep the price of tobacco products high through taxation. Raising taxes on tobacco is likely to be the most cost-effective intervention – also, from an equity perspective. In particular, this is the case in countries with a high level of smoking, as in many east and central European countries. This strategy increases tax revenues, while at the same time reducing smoking. It has been estimated that for every 10% real rise in price due to tobacco taxes, tobacco consumption generally falls by between 2% and 10%. Studies also indicate that the impact is relatively larger for young smokers, for smokers with low income and (possibly) for women (WHO, 2002).
- Introduce comprehensive bans on advertising. Advertising has a greater influence on the young, and tobacco advertisers in some countries have been adopting the tactic of specifically targeting disadvantaged areas with tobacco promotions.
- Analyse in depth the implicit unhealthy policies developed by tobacco companies when they target the population as a whole and when they specifically target young and more disadvantaged groups. Implement firm actions when marketing campaigns for tobacco products violate the regulatory framework for tobacco control.
- Intensify local tobacco-control efforts in disadvantaged areas. Given that most smokers are found in low-income areas in European countries, it is important to give a higher priority to these areas, in terms of financial resources for cessation services at primary health care facilities, tailored gender-specific health education programmes for high-risk groups (including pregnant women) and joint tobacco control programmes with labour unions at workplaces with a high proportion smokers. These efforts should be based on in-depth analyses of why smoking in these groups remains high in spite of a general knowledge that smoking constitutes a major health hazard.

- Promote the concept of smoke-free babies. Passive smoking by the fetus during the mother's pregnancy has negative long-term effects, including increasing the risk of low birth weight, which in turn is related to increased risks for different diseases later in life (Acheson et al., 1998). A major component in all strategies for reducing social inequities in health must therefore be to convince and support women to stop smoking during pregnancy. To help women living in disadvantaged circumstances, who have the greatest difficulty in quitting, both upstream and downstream initiatives are needed. Upstream policies include measures that improve the material circumstances of women living in hardship, by improving financial support to families with young children and removing barriers to work. Downstream policies include direct measures to restrict the supply and promotion of tobacco, and practical support for women trying to quit (Acheson et al., 1998).
- Develop tailor-made cessation programmes. The evidence that cessation interventions are effective is compelling, but the effects on different socioeconomic groups are less clear. An analysis of 16 recent studies targeted at low-income groups found that half of the cessation programmes demonstrated effectiveness (Platt et al., 2002). This calls for greater efforts to develop tailor-made gender-sensitive cessation programmes that aim explicitly at reducing smoking among low-income groups.
- Develop and strengthen a legal framework that ensures smoke-free work environments, public institutions and restaurants.

II. Alcohol misuse

General health impact

Worldwide, alcohol misuse causes 1.8 million deaths a year and is implicated in 20–30% of oesophageal cancer, liver disease, epilepsy, motor vehicle accidents and intentional injuries, including homicide. In a European context, alcohol is a major determinant of poor health and premature death. The very high consumption of alcohol in the central and eastern parts of the Region has been identified as a key factor in promoting the dramatic decline in life expectancy experienced during the 1990s. Alcohol has also generated significant gender differences in mortality, as it mainly contributed to the rise in mortality among middle-aged men (Cockerham, 2000). Nine countries in central and eastern Europe have the

highest alcohol-related burden of disease in the world (WHO Regional Office for Europe, 2005a). WHO has estimated that in eastern European countries alcohol contributes 50–75% of all cases of drowning, oesophageal cancer, homicide, unintentional injuries, motor vehicle accidents and cirrhosis of the liver (WHO, 2002).

In the European Region, however, the differences between countries are very significant. The burden of disease attributed to alcohol misuse across Europe ranges from 3% to 4% in such countries as Greece, Israel, Norway, Sweden and Turkey to over 15% in Estonia, Latvia and the Russian Federation, and up to 20% in the Republic of Moldova (WHO Regional Office for Europe, 2005a). The magnitude of alcohol-related mortality in the Russian Federation was highlighted in President Putin's State of the Nation address in 2005 (Putin, 2005), when he said, "every year in Russia about 40 000 people die from alcohol poisoning alone."

Impact on inequities in health

The social pattern of alcohol misuse in Europe is complex and differs by gender. Some countries have a social gradient among men, with rates of excessive drinking increasing with declining socioeconomic position, while other countries show similar rates across the social spectrum. In a study of 11 EU countries, rates of excessive drinking were significantly higher among less educated men in Greece, Ireland and Portugal – countries that also had some of the highest rates of excessive drinking in the population as a whole (Cavelaars, Kunst & Mackenbach, 1997). In the same study, rates of excessive drinking among women were much lower than those for men in all 11 countries, and did not show significant differences by educational group.

In the centre and east of the Region, alcohol consumption among men displays strong social gradients. In the Russian Federation, for example, 40% of men in the poorest fifth of the population reported daily consumption of spirits compared with 22% in the second poorest group and 12–13% in the more affluent sections of the population (World Bank, 2004). A review (Walter & Suhrcke, 2005) that

covered many countries in the CCEE and NIS concluded that a poor economic situation was strongly associated with higher levels of alcohol intake and more risky drinking behaviour. In the review, psychosocial factors were seen as playing a crucial role in generating the social inequities observed in health. Also, the review stated, “alcohol may be one of the major conduits through which psychosocial stress is translated into poorer health and higher mortality”.

An additional pathway to alcohol-related inequities in health is becoming apparent. For a given level of excessive drinking, the health damage that alcohol causes may be greater for manual workers than for professionals. For example, in Sweden, alcohol-related diseases and injuries were two to three times greater among manual workers than among civil servants, even when their level of alcohol consumption was similar (Hemmingsson et al., 1998). In particular, men working at unskilled manual jobs seem to have increased susceptibility to the harmful effects of alcohol. This differential effect may be explained by differences in drinking habits and social safety nets. In some countries, unskilled workers who abuse alcohol tend to drink excessively during the weekend (binge drinking) while civil servants who have the same level of over-consumption tend to distribute their consumption more evenly throughout the week. Binge drinking is far more common among lower than higher socioeconomic groups, as illustrated in country studies in Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova and the Russian Federation (Pomerleau & McKee, 2003), as well as in the Nordic and western European countries (Mackenbach, 2005).

The drinking habits of people doing manual work may also be more taxing on the body and more likely to result in accidents and other injuries, because of the nature of their work. Also, the social networks at both work and the home are likely to buffer and reduce the negative effects of misuse of alcohol better among civil servants than among manual workers. A civil servant coming to work drunk is more likely to get support to seek medical care for his alcohol addiction, while a drunk person that does manual work may experience a greater risk of being fired from their job. The manual worker is then likely to experience a vicious cycle of poor health due to unemployment, economic stress, and increased social problems and alcohol consumption.

How much of the social gradient in mortality does alcohol misuse explain? This varies greatly from country to country. In Finland, where there are high rates of excessive drinking, alcohol-related mortality accounted for 14% of the social inequities observed in mortality among men, 4% among women, and 24% and 9% of the social differentials in life expectancy, respectively, for men and women (Mäkelä, Valkonen & Martelin, 1997).

There is thus a double negative effect on increased social inequities due to excessive alcohol consumption: men in lower socioeconomic groups both tend to drink more than the rest of the population and also suffer a greater negative health impact for a given level of over-consumption. The extent to which misuse of alcohol explains the social gradient in mortality and morbidity varies from country to country.

Options for equity-oriented alcohol policies

Alcohol policies at all levels - international, national and local - need to be gender sensitive, as clearly the key issues are very different for the two sexes. They also need to integrate an equity-in-health perspective into the general programmes, to address alcohol misuse. Policy options for this integration include the following.

- Develop or maintain fiscal policies on price and access to alcohol. The most effective policy for reducing alcohol consumption is to increase the price and limit accessibility. This is one of the main reasons why countries like Sweden, with a high tax policy and restrictions on access in the mid-1990s, had the lowest levels of alcohol-related diseases and injuries in a west European context (Diderichsen, Dahlgren and Vägerö, 1997). The pricing tool is also of critical importance for reducing social inequities in health, given the differential health impact of alcohol misuse described above.
- Tackle upstream causes of alcohol misuse in a society – for example, the unemployment and social exclusion that triggers problem drinking. Develop social support systems at work and in the community, to reduce the additional negative health impact of alcohol misuse typically experienced among lower socioeconomic groups.
- Analyse the implicit unhealthy policies promoted by the alcohol industry and international agreements, which treat alcohol as any other product on the commercial market.

- Advocate international agreements to promote healthy public alcohol policies in the same way as is increasingly accepted for controlling tobacco. The converse – a low-tax policy and very few limitations on access to alcohol – is more profitable from a commercial perspective, as this policy increases consumption. A trend at present within the EU seems to be that these commercial interests are considered more important than public health concerns. Consequently countries like Sweden have to liberalize import restrictions and consider reducing the high taxes on alcohol.
- Develop tailored health education programmes. Isolated general health information campaigns that focus on the negative effects of alcohol abuse tend to have quite limited effects. It is unrealistic to believe that the negative effects on health of reduced price and increased access can be neutralized by intensified information about the risks associated with a high consumption of alcohol. However, tailored health education programmes for those at greatest risk, combined with structural policies to limit access to alcohol, may be effective. Special efforts should be made to reach adolescents, pregnant women and workplace supervisors.

III. Nutrition, physical activity and obesity

General health impact

Unhealthy diets with too much fat and sugar and too few vegetables and fruit constitute, together with lack of physical activity, major and increasingly important determinants of poor health and premature death across Europe. Overweight and obesity – that is, having a body mass index (BMI) of 30 or higher – is estimated to kill about 320 000 men and women in 20 countries of western Europe every year. The rate of obesity in some areas of eastern Europe is also high and has risen more than threefold since 1980 (WHO, 2002). The prevalence of obesity has reached 20–30% in adults in many European countries, with escalating rates in children. The WHO Regional Office for Europe estimated that about a third of cardiovascular disease is related to unbalanced nutrition and that 30–40% of cancers could be prevented through better diet (WHO, 2001). A report to the EU Summit on Tackling Health Inequalities, in October 2005, concluded “obesity threatens to become epidemic in many European countries” (Mackenbach, 2005).

Conversely, certain diets, when coupled with greater physical activity, can help protect health. For example, accumulating evidence indicates that a diet rich in fruit and vegetables may help protect against such major diseases as cardiovascular diseases and certain cancers of the digestive system (WHO, 2002). WHO estimates that an increase in the consumption of fruit and vegetables by a factor of two to four in central and northern Europe, for example, should lower the total disease burden by 4.3% among men and 3.4% among women in the European Region (WHO, 2002)). Regular physical activity also reduces the risk of cardiovascular disease, some cancers and Type II (non-insulin-dependent) diabetes (WHO, 2002). The highest levels of physical inactivity are found in eastern European countries, where it is the cause of 8–10% of all deaths, compared with 5–8% in other European countries (Lynch et al., 1997).

Impact on inequities in health

Inequities in health due to differences in diet are all too obvious in poor populations that cannot afford to buy the food needed to avoid undernourishment. But the health inequities due to differences in diet are also found in high-income countries, and from the very beginning of life. Women at the lowest end of the social scale in the United Kingdom, for example, are significantly less likely to breastfeed their babies. This increases the risk fivefold of their child(ren) being admitted to hospital for common infections during their first year of life (British Department of Health, 2003).

After infancy, unhealthy diets, too little physical exercise and obesity are often linked to each other and to a far more common cluster of risk factors in low-income groups, compared with more affluent groups. For example, within the EU, low-income households have the lowest consumption of fruits and vegetables (National Institute of Public Health, 2003). Women from lower socioeconomic groups in eastern European countries are at particular risk of eating too little fruit and vegetables (WHO, 2002).

Leisure time physical activities are less common among lower, as compared with higher, socioeconomic groups (Tenconi et al., 1992; Lynch, Kaplan & Salonen,

1997). In Sweden, for example, it is twice as common among people with limited education to have no leisure time physical activities compared with people with higher education (National Board of Health and Welfare, 2005).

The social gradient for obese people within the European Region is related to the level of economic development. In lower-income countries, such as Azerbaijan and Uzbekistan, obesity is most common among more affluent groups. There is then a shift towards more obese people among low-income groups in such countries as the Czech Republic and Poland. Obesity has also increased in Estonia, but a significant social gradient has only been found among women (Klumbiene et al., 2004). This inverted trend between income and obesity is very pronounced in many west European countries. Countries with a very steep social gradient for both men and women are, for example, Belgium, Denmark, Germany, the Netherlands, and the United Kingdom. Small social differences in overweight people are found in southern European countries, such as Greece, Portugal and Spain (Cavelaars, Kunst & Mackenbach, 1997).

Obesity among children of parents with lower educational status is also found in many countries across the European Region. In the Czech Republic, for example, children of parents with less education are twice as likely to be obese as children of parents with higher educational status (Walters & Suhrcke, 2005).

Moving from obesity to the opposite end of the scale, undernutrition is still a problem in many countries in the European Region – in particular, in the CCEE and NIS. The burden of undernutrition across this part of the Region is borne by the poor and has increased in the post-Soviet era (Walters & Suhrcke, 2005). For example, undernourishment has increased among the very young and old in the Russian Federation between 1992 and 2000. The prevalence of stunting among 2–6-year-old children increased up until 2000, when there was some improvement. The increase in underweight young adults was 77% between 1992 and 2003. In Azerbaijan, 11% of the poorest fifth of the population was malnourished in 2001, compared with 8% of the richest fifth of the population (which is still a high prevalence).

Given the general health impact of these risk factors and given social patterning, promoting healthier diets and more physical exercise among low-income groups is of major importance – also from an equity-in-health perspective.

Equity-oriented policy options on diet and physical activity

The equity-in-health dimension is often neglected, even when comprehensive efforts are undertaken to promote healthier diets and more physical exercise. This may be due in part to rather limited research on the causes that generate the observed social inequities in diet, physical exercise and obesity. Also, the structural determinants of these lifestyles are rarely considered. In this situation, general health education campaigns alone tend to be ineffective among those who are at greatest risk, while public investments in recreational facilities primarily benefit more affluent groups that are better off. Even when average figures for the population as a whole indicate improvements, such as healthy diets and more exercise, the health divide is likely to widen as the *healthier habits* are found primarily among more advantaged groups.

The challenge is to initiate policies and actions that have the greatest positive effects among the worst off in society. The essential basis for these strategies should be the reality experienced by, and interests expressed by, low-income groups. The following examples illustrate what this can mean in practice.

- Carry out health-equity impact assessments on major European agricultural policies to monitor whether they are helping or hindering access to healthy diets for low-income groups. Certain components of the EU Common Agricultural Policy (CAP), for example, create barriers to a healthier diet. A recent health impact analysis of the CAP, performed by the Swedish National Institute of Public Health, concluded that these policies “hinder the achievements of lifestyle modifications that reduce the risk of obesity, coronary heart disease, Type II diabetes, cancer and alcohol-related social and medical problems – diseases which cause more than 70% of all deaths in the EU region” (National Institute of Public Health, 2003). This is because the CAP limits the consumption of fruit and vegetables among low-income groups by increasing the price, while at the same time providing incentives for the consumption of animal fats from dairy products. These assessments should therefore be followed by an action plan for promoting a healthier diet, to be considered by responsible political and professional bodies. Decisions taken or not taken should be periodically reviewed, analysed and widely published, to make both healthy and unhealthy policies explicit.

- Develop equity-oriented national strategies for promoting and facilitating affordable and healthier diets and increased possibilities for everyday leisure-time physical activities. The implementation of these strategies should include periodic assessments of the prevalence of unhealthy diets and the lack of leisure-time physical activities, as well as the rate of malnutrition and obesity by socioeconomic group. Special efforts should then be made to identify the driving forces behind increased trends in obesity in the general population and in low-income groups in particular.
- Work with the food industry, and catering enterprises to improve the nutritional quality of processed food.
- Provide free school lunches of a good quality and restrict access to less healthy foods and sweets on the premises of the school.
- Increase the availability and accessibility of fruits and vegetables, as well as other low-fat products – in particular, in low-income areas. Raise the financial support given to low-income families with children, to make it possible for them to choose a healthier diet.
- Develop tailor-made health information programmes on healthy diets for specific target groups. These should be accompanied by structural changes that facilitate dietary change. For example, the Labour Union in Sweden has initiated such a programme for truck drivers. In addition to information to the drivers and their families, the programme includes healthier alternative dishes at the eating places along the main roads often frequented by the drivers (Dahlgren, 1997).
- Introduce or maintain strict rules and controls on advertising and promotions that target children and promote the consumption of foods considered less healthy (foods and sweets high in fat, sugar or salt, or both).
- Give priority to public investments in recreational facilities for disadvantaged areas. Facilitate activities to renovate school and preschool playgrounds, so that they inspire play, movement and outdoor recreation. Also, special attention should be given to the interests of obese children.
- Monitor progress by periodically calculating public investments or subsidies per person in recreational facilities in better-off and less-privileged areas. With regard to physical activity, perform surveys that show the use of different facilities in less-privileged areas, by social background and by previous habits.



PART C:
Developing equity-oriented strategies for health

Strategies for tackling the health divide

Strategies for reducing social inequities in health should be seen as an integrated part of population-based policies and programmes for health development. The social dimension of these general policies should – just as with age and gender – always be considered. The general requirements for transforming plans into action also apply when strategies for reducing social inequities are developed, implemented and evaluated. These general requirements should include the following:

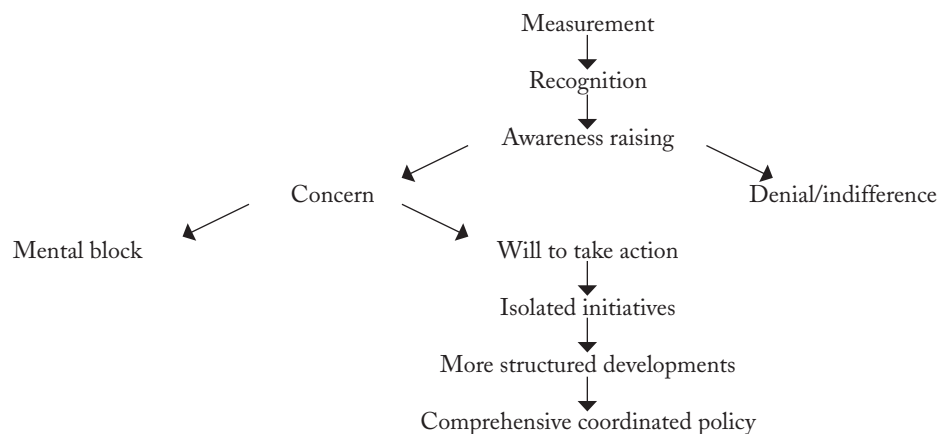
- the availability of relevant and good descriptive data on the magnitude and trends of social inequities in health and their main determinants;
- the existence of explicit equity-oriented objectives and targets that are directly linked to policies, actions and financial resources needed for the implementation;
- a realistic assessment of possibilities and constraints, with special attention given to external unhealthy policies and actions that generate inequities in health; and
- an adequate management capacity for implementation, including efficient mechanisms for intersectoral collaboration and coordination at national and local levels.

Currently, many economic and commercial policies with a significant impact on health are not analysed from a health perspective. To remedy this, an additional policy recommendation is that all policies and programmes likely to have a significant positive or negative impact on health should always be assessed from a health perspective. Whenever possible, these health impact analyses should describe the effects on health by gender and socioeconomic group.

The action spectrum across Europe

When surveying what is actually happening in Europe today, a spectrum of actions for addressing social inequities in health can be discerned, as illustrated in Fig. 5. At one end of the spectrum are countries that do not even measure, let alone recognize, that social differentials exist within their boundaries. Without measurement, the inequities (conveniently) remain invisible. Some European countries have highly sophisticated information and monitoring systems that detect health differences, but then the information is not put in the public domain – at the pre-recognition part of the spectrum. Others have the information published, but the level of awareness of this information is very low, as there has been little activity to publicize the data. Some countries that have a raised awareness of the issue may exhibit denial or indifference and, thus, may still not attempt to take any action. Others have reacted with concern when they become aware of the inequity in health existing within their borders – particularly, those that pride themselves on having achieved a fair society. This concern, however, induces a mental block in some countries, in response to the complexity of the problem, leading them to fall back on calls for more research before they can contemplate action. Signs of movements along the alternative pathways, however, are increasing, with some countries taking action, even if piecemeal at first. At the opposite end of the spectrum, a few countries are moving towards a coordinated national strategy to attack the problem (Whitehead, 1998).

Even though impressive progress has been made in places, no European country has yet reached the stage of a comprehensive, coordinated policy. Some countries, however, have moved in the opposite direction, in response to changes in their political climate. This diverse European experience does demonstrate what can be achieved when there is a serious commitment to take action. Countries within the European Region have the potential to learn from one another, including setting targets and assessing the advantages and disadvantages of various strategies, as detailed below.

Fig. 5. Action spectrum of inequities in health

Source: Whitehead (1998)

There is often a significant gap between policy statements to reduce social inequities in health and the actions needed to reach this objective. Very few in-depth analyses have been carried out to identify the main reasons for this gap. The following constraints and possibilities are worth analysing further, however.

- **Lack of political will.** Political statements to reduce social inequities in health may not be matched by a corresponding political will to tackle the determinants of these inequities. The extent to which different political parties accept or reject policy options, such as those presented in this report, can be a test of political will. In the political democratic process, special efforts could be made to highlight and discuss alternative policy options that have an impact on the different determinants of health.
- **Lack of knowledge.** Even with political will, there is often a genuine lack of operational strategies to link policy goals to actions. Without being able to present actions to improve the situation, the political commitment may then fade away, as politicians are unlikely to give a continued high priority to the problem. Some researchers may consider existing knowledge incomplete and require *absolute* evidence before giving any advice. They are then likely to respond by asking for additional research funds, rather than providing the

best possible information in the given situation. Highly relevant facts and experiences gained may also remain unknown, as they are only presented in an academic language in scientific journals that are neither accessible nor easily understood by non-specialists. Policy-relevant summaries of research findings and experiences gained can help to bridge this gap between policy-makers and researchers and can increase the possibilities of transforming policy goals into action.

- **Lack of financial resources.** Health equity policies are typically presented and discussed as if they could be implemented without any additional financial resources. As this is rarely the case, they tend to fade away when budgets and manpower resources are decided upon at national and local levels. When presenting such policies, financial and manpower resources should be estimated and the targets adjusted to the resources allocated. In this respect investments in health and other investments for social and economic development are the same.
- **Lack of coordination and management capacity.** Multisectoral health policies and programmes sometimes lack a coordinating and supporting management structure, both at national and local levels. In this case, a high priority should be given to capacity building, which may include a strong political leadership by a special minister of population health (in addition to a minister of health services), a strong National Institute of Public Health and local multisectoral health boards. The management and coordination functions developed for implementing multisectoral environmental policies provide useful lessons when trying to strengthen these functions for the implementation of equity-oriented health policies.
- **Lack of ownership.** Even when attempts are made to incorporate health into other policy sectors, it might still be seen as a medical issue only, rather than one related to social and economic policies and actions. Clearly stated responsibilities for all implementing bodies connected with specific determinants of health can help counteract this problem. The formulation of specific short- and long-term equity targets for improved health and for specific determinants of health would also be helpful.

- **Lack of policy audit and evaluations.** Equity-oriented health policies are rarely evaluated and, therefore, carry no serious consequences for those responsible for implementing the policies. Furthermore, important social and economic policies and programmes can be planned and implemented without any assessment of their health impact. At present, an increasing number of countries are addressing these shortcomings, by periodic health-policy audits and health-inequity impact assessments.

Setting health equity targets

The right to the highest attainable standard of physical and mental health is a human right endorsed by almost all countries. The health status of more affluent groups can be used to indicate the current level of health attainable within a given country. In this respect, specific health-equity targets that state the extent to which this health divide can be reduced during a certain period of time should supplement targets for the whole population. Average health targets for the whole population can never capture this human rights dimension of health, as they can be achieved even when the poor are not experiencing any improvements and the health divide is widening.

The WHO Regional Office for Europe was a pioneer in this type of health-equity target, by stating as the very first target of the health for all strategy launched in the early 1980s that “differences in health between countries and between groups within countries should by the year 2000 be reduced by at least 25%, by improving the level of health of disadvantaged countries and groups” (WHO Regional Office for Europe, 1985).

This proved to be an important visionary target, giving the equity-in-health objective visibility and credibility, even when national governments tried to dismiss or ignore existing social inequities in health within their own countries (Whitehead, Scott-Samuel & Dahlgren, 1998). However, actually achieving this target was unsuccessful, as the health divide increased during this period in most, if not all, European countries.

The health-equity target for Europe has been further developed in the WHO Regional Office for Europe Health 21 strategy, by repeating that the gap in life expectancy between socioeconomic groups should be reduced by at least 25% and stating that the socioeconomic conditions that produce adverse effects on health – notably, differences in income, low educational achievement and limited access to the labour market – should be reduced. In addition, the targets entail greatly reducing the proportion of the population living in poverty.

By now, most European countries have general health policies that state that inequities in health shall be reduced (Judge et al., 2005), but there are still very few examples of quantified equity targets that are backed by specific strategies and financial resources. The reduction of significant and avoidable inequities for one of the most important dimensions of human welfare is thus rarely addressed in operational terms.

There are, however, indications that equity-in-health issues might be placed higher on the policy agenda in an increasing number of countries and within certain international organizations, in addition to WHO. Quantified and fairly operational health-equity targets exist – for example, in Finland, the Netherlands and the United Kingdom. Quantitative equity targets are also adopted at local levels, even when there are no national health-equity targets. This is the case in Spain, where the Basque region, for example, has a target for reducing social differences in mortality due to diseases of the circulatory system, from 39% in 2002 to 30% by 2010 (Judge et al., 2005). Inequities in health were also chosen as one of two main health themes of the United Kingdom's Presidency of the EU in 2005. At the EU Summit on Tackling Health Inequalities, in October 2005, it was recommended that EU Member States should consider adopting equity targets aimed at levelling the social gradient in health (Judge et al., 2006). It was also noted that efforts to realize such targets would contribute to one of the EU's strategic objectives – promoting a more cohesive society (Judge et al., 2005:40).

Practical pointers for setting national targets

The following principles should be considered when setting national targets.

- The aim should always be *level up* by improving the health of the worst off in society, and never to *level down* by reducing the health status of the groups that are better off.
- For a reduction in the health divide to take place, the improvements in health must be *greater* among disadvantaged groups than among more privileged groups. Reducing social inequities in health stands for *reducing a gap*. Equity targets should therefore not only be expressed as improved health for disadvantaged groups, but should also be expressed as absolute or relative differences between high- and low-income groups. The United Kingdom provides an example of such a national equity-in-health target: “Starting with children under one year, by 2010 to reduce by at least 10% the gap in mortality between routine and manual groups in England and the population as a whole, from a baseline of 1997-99” (British Department of Health, 2003).
- Inequities in health exist not only between the most and the least privileged groups in the society but are also typically experienced between middle-income and high-income groups. These inequities can best be described by a social gradient. Very few countries have yet to state their equity-in-health targets for eliminating this social gradient – for example, that life expectancy at birth should be the same for all social groups.
- All health-equity targets should be based on analyses of the main determinants that influence the observed inequities in health. Special efforts should then be made to estimate the potential impact of different policies and actions that relate to these determinants, to assess what changes are needed to reach the stated health-equity targets.

The main types of strategy

The strategies used for implementing different equity-oriented health policies differ, depending on the type of health problem, but they should all be underpinned by a social determinants approach. Taking this social determinants approach, the following five types of strategies can be identified: integrated determinants of health strategies, disease-specific strategies, settings-based approaches and group-specific strategies.

1. Integrated determinants of health strategies

One of the most effective strategies is to integrate health-equity objectives into existing social and economic policies and programmes for economic growth, taxes, employment, education, housing, social protection, transport and health services, among others. Inclusion of the health-equity impact of these policies aimed at the determinants of health would be an important advance. Key questions to ask as part of the integration process are: how does this policy or programme affect the health of different social groups by age and sex and what can be done to optimize the positive health impact in the population as a whole and optimize it for disadvantaged groups in particular?

To answer such questions, the highest possible priority should be given to the development and use of health-equity impact analyses. Special efforts should then be made to assess the health impact of unhealthy commercial policies and other policies that generate social inequities in health. Health-equity impact assessments should – as with environmental health impact analyses – be considered a normal part of any assessment of public and commercial policies and programmes that are likely to have positive or negative effects on health. It might be necessary to make such health impact analyses compulsory by law or by regulations.

2. Disease-specific strategies

When a coordinated system of specific actions is needed, the disease-specific approach is typically chosen for combating such infectious diseases as HIV/AIDS, tuberculosis and severe acute respiratory syndrome (SARS) or for preventing suicide. The determinants of these specific diseases are then tackled. The advantage of this approach, compared with the integrated approach described above, is a closer link to medical science and interventions that are typically disease oriented. Specialists in different diseases may also be more likely to participate in disease-specific programmes than in strategies that focus on wider social determinants outside their normal sphere of activity.

A disease-specific approach risks limiting the perspective to downstream factors in the causal chain, such as high blood pressure and high levels of cholesterol, rather than directing the perspective to the causes of the causes. When the disease-specific approach is applied to such noncommunicable diseases as cardiovascular diseases and cancer, the risk of duplicating strategies for such risk factors as tobacco, alcohol and unhealthy diets is also obvious, as these risk factors are causes of many diseases, including cancer and cardiovascular diseases. The development of one tobacco-control programme related to each of the many diseases caused by tobacco is obviously very inefficient. A medically oriented disease-specific programme may also pay less attention to health-equity issues, if disease experts have difficulty seeing the social dimension of the health problem.

Sometimes, however, a coordinated, systematic approach that focuses on a specific disease is effective in mobilizing public action. Special efforts should then be made to link these strategies to policies and programmes that focus on social and economic determinants of health, to reduce the risk of duplication and of too narrow the focus on downstream risk factors only.

3. The settings approach

The settings approach can be defined in terms of a specific arena (such as workplaces, schools or hospitals) or a geographic area (such as a city or community). This approach has long been used to tackle health hazards at work. The focus is on all major determinants of health in a certain workplace, rather than on a single risk factor. This approach has also been promoted, in particular by WHO, in other settings, such as Healthy Schools and Healthy Hospitals initiatives. The equity-in-health dimension of these programmes has sometimes been weak. There is a need, therefore, within this approach, to identify the determinants of social inequities in health. Special efforts should also be made to initiate settings-based strategies in disadvantaged communities. Examples of actions in a setting approach are given in the section on education (page 44-45) and the section on work environment (page 47).

Injury prevention lends itself to a settings approach and indeed there has been a great deal of action in relation to accidents on the road and in the workplace in western Europe in particular. Injuries in the home have been relatively neglected, however, even though this is an important setting, both as a site for injury, and as a potential focus for prevention initiatives. There is a growing problem of death and disability from injury in eastern Europe, and a widening health divide: people in low-to-middle income countries in the Region are 3.6 times more likely to die from injuries than those in high-income parts of Europe (Sethi et al., 2006a). Within European countries, it is the poorer and more disadvantaged sections of the population who are at greatest risk from accidents and injury, making injury prevention an important subject for those concerned with tackling inequities in health. Practical suggestions for what can be done on injuries and violence, including in different settings, can be found in a recent WHO EURO report (Sethi et al., 2006b).

Community-oriented strategies are in many respects similar to settings-based strategies, but are much wider in scope, their focus being on a certain geographical region, town or part of a city. WHO has promoted the development of such strategies, including Safe Communities and Healthy Cities. The community-oriented approach has many advantages of ownership – that is, the people that live in a community have a natural interest in promoting the possibilities for a healthy life in their community or town. This may also stimulate political interest and the start of a democratic dialogue about certain public health issues. Experiences from local environmental programmes, such as activities initiated as a follow-up on global and national environmental policies, also illustrate the possibilities of a community-oriented approach.

Community-oriented strategies also entail some risks. From a health-equity perspective, there is a risk of relying mainly (or only) on a community-oriented approach for health development, when wider policies are also required. There is also a risk that the health-equity perspective will be limited within community-oriented programmes, when the interests of more affluent groups (who often are more active in such programmes) differ from the needs of less-active and less-articulate disadvantaged individuals and families. It is therefore important

to ensure that the community-oriented approach becomes a programme that benefits all in such a way that inequities in health are reduced as efforts are made to improve the health within the community as a whole. This may call for additional policies and actions that focus on the specific determinants of social inequities in health, as described on pages 21-26.

The equity-in-health dimension can also be integrated with urban renewal programmes in disadvantaged areas. An interesting example of this approach is the Health Action Zone initiative in the United Kingdom, which identified action zones for multisectoral intensive efforts, because their burden of health problems and level of material deprivation were much higher than normal. In these areas, extra funds and efforts are employed to improve health, by interconnected community development and area regeneration strategies (Bauld & Judge, 2002). An advantage of this type of programme is that well-coordinated and comprehensive interventions in disadvantaged areas have a greater chance of breaking the vicious cycle of poor health and poor socioeconomic status. The potential negative effects, from an equity-in-health perspective, are that disadvantaged individuals and families that live outside these action zones obviously do not benefit and may be neglected, even though they may constitute a much greater proportion of the total number of people in poverty than those who live in the poorest areas of the country.

4. Group-specific strategies

Group-specific approaches can include major population groups, such as children and elderly people, or very marginalized groups, such as homeless people and certain immigrants with a high risk of poor health. A group approach is very common and appropriate for promotion of child and adolescent health, as well as for health promotion among older people. Group-specific strategies are typically combined with determinants of health strategies, in which the highest priority is given to the determinants of social inequities in health for that particular age group.

This type of strategy for infants and children may include, for example:

- free mother and child health care programmes with special outreach services, to ensure that the whole target group benefits from services offered;
- intensified information and support to quit smoking during pregnancy;
- promoting breastfeeding, which in countries such as the United Kingdom have an inverse social gradient;
- early detection of physical and mental problems, and programmes for children from less-privileged or poor families;
- creation of supportive networks for, and among, single mothers with limited social contacts; and
- support to families with children that have serious problems due to, for example, financial crises or poverty, long-term unemployment, psychosocial problems, and domestic violence or excess use of alcohol, or both.

The elderly are another age-specific group that, in addition to universal policies, need special attention, to reduce the risk of poverty. Policy options include increasing pension disbursements and promoting coordinated systems for health and social services. These options need to provide adequate professional medical and other services for those with the most limited access to adequate good informal care.

Group-specific strategies can also complement the determinants of health strategy (described above), when trying to improve the possibilities for surviving and living a healthy life among very marginalized groups. These groups differ from country to country, but may include homeless people, sex workers or ethnic minorities, such as the Roma people, who experience both more and different health risks, compared with other groups in the country where they live. To improve their chances to return to a healthier life, there is a need for group-

specific strategies, where a number of different preventive and curative actions in housing, medical treatment and social support are provided, in addition to improved access to good quality services for health and long-term care, social services, and education (Ziglio et al., 2003).

The risk of reinforced stigmatization must always be assessed in strategies that focus on subgroups in the population. Stigmatization may be reduced if these special efforts to reach a specific target group are carried out within the framework of general strategies for improving health and reducing social inequities in health. Special efforts should also be made to increase access to routine social and health services. Limited access to these health services may be due to lack of health insurance. This seems to be the case for the Roma people who live in Romania, where 75% of the population as a whole is covered by the health insurance system, compared with 34% among the Roma people.

When developing group-specific strategies for very disadvantaged groups, it is of strategic importance to identify and try to intensify efforts to reduce upstream causes, such as discrimination due to social or ethnic background (or both), to poverty and to unemployment. Direct causes that force people to live on the streets, due to their very weak position in an increasingly commercialized housing market, need also to be tackled.

Putting the last first in health for all strategies

Health for all strategies often turn out to be *health for some* strategies, with substantial and increasing social inequities in health. The strategies presented in this report are intended to be health for all strategies. Compared with many existing strategies for health, the difference is the special focus on determinants of social inequities in health. Given the political will that leads to more equitable resource allocation and given professional competence, there are good reasons to believe that levelling up strategies will prove beneficial, not only for reducing social inequities in health, but also for successfully promoting health for the whole population. Putting the last first is the key to achieving *health for all*.





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