SOCIAL INEQUALITIES AND PUBLIC HEALTH

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Introduction

A person's health is determined by a wide range of influences they experience during their lives – from the genes they inherit, and the conditions they experience during their lives from before birth to older ages. These influences are many and complex. The very different experiences lead to variation in health. To the extent that there are systematic differences in these experiences of individuals and groups related to the social conditions in which a person is born, lives, works, and dies, the resulting health differences are referred to as health inequalities. Where inequalities are avoidable by reasonable means, they are considered to be inequitable (CSDH 2008). A distinction is also made between the determinants of population health (such as the cleanliness of a water supply that affects everyone in the area supplied) and the social determinants of health inequities. The latter cover factors that impact differently on groups according to a range of social factors.

The WHO Commission on the Social Determinants of Health (CSDH) (CSDH 2008) has highlighted the many factors, including education, employment and work, health care, transport and housing, the societal stage of industrialization, urbanization, and globalization that shape health and health inequities. Most important, it has indicated how these factors lead to differential exposures to risks and different vulnerabilities and assets – all ultimately determined by the distribution of power, money, and resources in society.

Inequalities in health between and within countries

Health improvements are achievable by reasonable means. During the twentieth century, many countries have achieved major improvements in population health. Taking life expectancy as a summary measure of population health, there was a remarkable increase of 20 years in average global life expectancy since 1950 (UN 2011). Notably, however, progress in population health has been uneven across regions (Figure 3.1) and stark inequalities in health and life expectancy exist between and within countries (CSDH 2008).

When overall health improvements are achieved, it is frequently the case that health inequities remain. Figure 3.2 demonstrates trends in the social gradient in under-five mortality in Egypt according to the distribution of wealth, measured in terms of
Figure 3.1 Life expectancy at birth by region, 1970–1975 and 2000–2005
Source: UNDP 2006

Figure 3.2 Trends in under-five mortality per 1,000 births by wealth quintile: Egypt
Source: Prepared by the authors using data from MEASURE DHS 2011
household assets. Between 1995 and 2008, the overall rate of child deaths fell by two-thirds, but the ratio of the lowest to the highest wealth quintile only fell by one-third, so while there were improvements for all, substantial inequalities remained. To reduce inequalities, it is necessary for those who are worse off to improve more quickly than those who are better off.

**Social determinants of health**

The explanatory framework used by the CSDH builds on previous work (Solar and Irwin 2010) and outlines how health and health inequities such as those described in Figures 3.1 and 3.2 are created. The framework (Figure 3.3) draws together both 'the social factors promoting and undermining the health of individuals and populations' and 'the social processes underlying the unequal distribution of these factors between groups occupying unequal positions in society' (Solar and Irwin 2010: 27). The term 'social determinants of health' encompasses all these factors.

Health is shaped by a person's genes and by the conditions experienced throughout life; before birth and in early life; and by the social and physical environments of daily life throughout adult life (Figure 3.4).

Factors of daily life include material conditions, such as access to nutritious food, clean water and sanitation, basic health care, safe and health-promoting living and working conditions along with cultural and societal norms and values.

![Diagram of Social Determinants of Health and Health Inequities](image)

**Figure 3.3** Conceptual framework of the Commission on Social Determinants of Health

Source: CSDH 2008, reproduced with permission
conditions, as well as psychosocial factors. Within countries the link between poverty, poor material living and working conditions, and poor health and disease is apparent. But health inequalities are also seen among groups that are not poor. For example, the Whitehall studies of British civil servants showed that, even among employed people who are not poor, there is a social gradient in mortality and morbidity that runs from the bottom to the top of society (Marmot et al. 1984, 1991). The search for explanations therefore includes examination of material conditions and psychosocial factors — including lack of control, social support, and social cohesion — as well as the connections between material and psychosocial factors.

Material conditions and psychosocial factors are experienced differently by groups within a social structure depending on the nature of social stratification in a society making groups more or less vulnerable to disease. Lower material living conditions and lower control experienced by disadvantaged groups in society are reflected in poorer health and lower life expectancy compared to more advantaged groups.

Behavioural choices also influence health outcomes across society. These include health-related behaviours that are risks for non-communicable disease, including smoking, harmful use of alcohol, physical inactivity, and diets that are high in saturated fats, sugar, and salt. However, individual choices that people make are shaped by the social environment they inhabit, as well as cultural norms and values. For example, smoking has been identified as a coping strategy among women in England struggling with psychological stresses associated with multiple life challenges of caring for relatives and living on low incomes (Graham 1987).

The functioning of health systems is an important influence on health and the distribution of health. Inequity in access to health care and preventive services contributes to differential health outcomes, but does not fully explain the distribution of health in society. Beyond health care, the health care system has a wider role through working...
with other sectors for health promotion (for example, risk reduction in lifestyles and behaviour) and ill health prevention.

The nature and level of social stratification flow from inequalities in wealth, income, and education. Differential vulnerability is also created by experiences of people in their daily lives, for example power relations between men and women and the extent to which they are balanced, and discrimination on the basis of race or ethnicity.

Social stratification within a society is driven by national socio-economic context, governance arrangements, economic and social policies, and cultural and societal norms, values and biases. These national-level factors are in turn influenced by systems of global governance, trade, aid, and international relations (CSDH 2008).

The centrality of power differentials in the causal framework leading to health inequalities led the CSDH to emphasize the role of empowerment in improving health and reducing health inequalities. The CSDH described empowerment in three dimensions operating at individual, community, and national levels – the material requirements for a decent life; psychosocial empowerment, having control over one’s life; and political empowerment, having a political voice and participating in the decisions that affect lives. The notion of empowerment aligns with Amartya Sen’s capability approach to human well-being, in which well-being is linked to the capabilities of people to realize various functionings or freedoms that enable people to live a life they have reason to value (Sen 1999).

The social determinants approach to health goes beyond considering how to encourage behaviour change to reduce exposure to lifestyle risks, although behaviour change will be part of what is needed. Indeed, it goes beyond what is traditionally considered to be the domain of the health sector. The social determinants of health approach applies values of social justice in every sphere of public and private sector policy. Simply put, the social determinants of health approach implies asking the question ‘How does this strategy/policy/intervention affect people’s lives and the ability of people to live a life they have reason to value?’

The CSDH made its recommendations across a framework that takes a life course perspective on ‘the conditions in which people are born, grow, live, work and age’, and examines ‘the inequitable distribution of power, money and resources’ (CSDH 2008: 2). The CSDH described three principles of action to tackle health inequities:

1. Improve the conditions of daily life – the circumstances in which people are born, grow, live, work, and age;
2. Tackle the inequitable distribution of power, money and resources – the structural drivers of those conditions of daily life – globally, nationally, and locally;
3. Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health.

Within these three overarching recommendations, the CSDH arranged its full set of recommendations under the following areas for action:

*Daily living conditions*

- Equity from the start (early child development and education)
- Healthy places
SOCIAL INEQUALITIES

Fair employment and decent work
Social protection
Universal health care

Power, money, and resources
- Health equity in all policies, systems, and programmes
- Fair financing
- Market responsibility
- Gender equity
- Political empowerment – inclusion and voice
- Good global governance

Monitoring, research, and training

The following sections use this framework to outline how social determinants affect health.

**Early child development and education**

The period before birth and during early childhood is the most important development phase throughout the lifespan (CSDH Early Child Development Knowledge Network 2007). Development across the interrelated domains of physical, social-emotional, and language-cognitive development strongly influences well-being, obesity/stunting, mental health, heart disease, competence in literacy and numeracy, criminality, and economic participation throughout life (CSDH Early Child Development Knowledge Network 2007: 15).

Good conditions for development in early childhood set the foundations for building resilience to stressful situations faced throughout life, enabling development of self-esteem and sense of control that are fundamental to health and well-being. Brain development at critical periods in early life responds to stimuli in the social environment, such as those that arise in interactions between babies and caregivers. The quality of the psychosocial stimulation that babies and young children receive and elicit through engagement with their social and physical environment shapes the development of cognitive function and the development of habitual ways of responding to and reacting towards others. The health and nutritional status of women before, during, and after pregnancy, good nutrition and health care, and nurturing, supportive, caring, and responsive living environments for children in the early years affect their development and future life trajectory.

Interventions such as parenting support and home-based and centre-based programmes can improve children's cognitive and social-emotional development in the early years of life (Engle et al. 2011). Children from poorer backgrounds are less likely to attend early child development programmes (Figure 3.5). This situation contributes to widening social inequalities from which health inequities flow.

To the extent that good conditions for early child development vary across a continuum of social advantage and disadvantage, approaches that improve the conditions for development before birth and in early life proportionately according to need are a promising way to improve health and reduce health inequities.

33
Healthy places

Both the built environment and the social environment in which people live affect health in multiple ways. The world population became predominantly urban in 2008 and it is predicted that by 2030 around 60 per cent of the world’s population will live in urban areas (Population Reference Bureau 2007). There are several correlates of urbanization that impact health and health inequities. Over one billion people worldwide live in overcrowded slum areas with poor and inadequate access to vital services such as water and sanitation. At the same time, concentration of resources in urban areas can contribute to rural underdevelopment and poverty. Urbanization is associated with increased consumption of energy-dense foods and fuel, and increased use of mechanized transport. Relative social deprivation within urban areas is associated with increased risk of poor health (Figure 3.6).

Effective policy responses focus on good urban governance that positions sustainability, health and well-being, and social equality into urban planning and design (KNUS 2007). This is enabled by participation of communities themselves in the governance process. Urban design and policies that encourage active transport, rather than dependency on motorized vehicles, benefit both population health through increased physical activity and improved air quality and contribute to reduction in greenhouse gas emissions. Urban development that encourages social integration and builds trust between and within communities contributes to both improved health and reduced violence and
Figure 3.6  Cardiovascular deaths of people aged 45 to 64 and social inequalities: Porto Alegre, Brazil

Source: Bassanesi et al. 2008, reproduced with permission

Note: Darker shading indicates deaths attributable to poverty

criminality. Safe public spaces and green environments within urban areas contribute to mental and physical health and well-being.

**Fair employment and decent work**

Work is the origin of many important determinants of health. Work can provide financial security, social status, personal development, social relations, and self-esteem and protection from physical and psychosocial hazards.

(Marmot et al. 2008: 1663)

People need sufficient material resources gained from work or employment to provide the requirements for a healthy life. People with higher educational attainment or marketable skills are better placed than people with low education or with low skills to access good employment opportunities. Employment conditions that are insecure or precarious, and working conditions in which there is low control and little decision latitude, or where effort and rewards at work are imbalanced, can cause stress and poor health. Figure 3.7 shows the association between effort–reward imbalance at work and risk of poor health in six European countries. While there was variation between countries, high effort–reward imbalance was associated with increased risk of poor health outcomes (Figure 3.7).
Addressing employment opportunities is a basic requirement of national macroeconomic and development policy. A pattern of uneven economic development within countries may exacerbate regional inequities in health outcomes, such as urban–rural inequities.

In order to promote social equality, employment policies need to be inclusive and sustainable. A range of responses have been developed to support entry into employment in advanced economies, including active labour market policies that provide training and support to people seeking access to employment. Employment policies that focus on good work and provide a minimum income for healthy living have been emphasized (Marmot Review 2010).

In developing countries, a large proportion of the population works in the informal sector. South Asia and sub-Saharan Africa have the highest rates of informal sector working, at 77 per cent and 73 per cent of total employment, respectively (ILO 2008). By nature, the informal sector provides precarious employment, characterized by low incomes and a lack of financial and social security. An effective policy response focuses on protecting the rights of people working in the informal sector.

**Social protection throughout life**

Low living standards are a powerful determinant of health inequity. The fundamental principle of social protection is that all people need support at some point in their lives.

(Marmot et al. 2008: 1664)
The extent to which social welfare policies provide support for those in need affects levels of poverty in a country. Social protection systems that are universal and generous are associated with better population health (CSDH 2008). Figure 3.8 shows data from a study that examined the relationship between social welfare spending and age-standardized death rates from all causes in 18 European countries (Stuckler et al. 2010). Higher social spending per capita was associated with lower mortality rates, standardized by age.

Social protection policies may include a range of services and benefits in the form of cash transfers or other benefits such as food. Many developing countries have introduced systems based on conditional cash transfers (CCT), which distribute payments conditional on recipients making use of public services such as child health services and ensuring that their children attend school. An example is Brazil’s CCT scheme, Bolsa Familia, which covers roughly 52 million people (about 25 per cent of the Brazilian population) and is targeted at poor families with children. Evidence shows that 25 per cent of the fall in the Gini coefficient measure of income inequality in Brazil since 2001 is attributable to Bolsa Familia (Santos et al. 2011). In addition, Bolsa Familia has increased food security, improved nutritional outcomes among children aged 12 to 59 months, and reduced school absence and child labour among older children (Santos et al. 2011). Brazil has responded to the need to support employment among Bolsa Familia recipients by introducing the Proximo Passo programme, which aims to support people into work through training and job guarantee schemes (Santos et al. 2011).

![Figure 3.8](image-url)

*Figure 3.8* Relation between social welfare spending and all-cause mortality in 18 EU countries, 2000

Source: Stuckler et al. 2010, reproduced with permission from BMJ Publishing Group Ltd
Universal health care

The health care system is a determinant of health. Inequitable access to health care contributes to health inequities. This is most starkly manifest in inequities in maternal and infant mortality, which are largely avoidable through maternal and child health care services. While maternal and infant mortality rates have been declining worldwide, they remain high in many countries, especially among poorer groups. Where maternal and child health care services fail to reach the poor, progress in achieving improvements in population will inevitably be limited (Houweling et al. 2007). High maternal mortality rates in low-income settings are the end result of inequalities in economic and political power, including between men and women, which can be addressed at multiple levels (Sen and Östlin 2008).

Beyond health care, the health system has an important role in developing health promotion and ill health prevention strategies with partners outside the health sector. These might include school- or community-based health education and nutrition services.

Health equity in all policies, systems, and programmes

Every sector of government and society has the potential to affect health and health inequity. The CSDH argued that effects on health and health equity should be assessed to inform decision-making in all policies, systems and programmes. It is particularly important that policies are coherent, that is, that one policy (or set of policies) does not work against another. For example, a recent proposal in the United Kingdom to increase the speed limit on motorways from 70 miles per hour to 80 miles per hour, if enacted, might increase transportation efficiency but would increase both carbon dioxide emissions and the risk of road deaths.

Fair financing within and between countries

In countries at all stages of economic development, creating the conditions for health equity requires to a considerable extent the political will to invest in the social determinants of health, from early child development and education through living and working conditions to health care (CSDH 2008). Earlier sections in this chapter have outlined how poverty levels are influenced by the extent to which work provides sufficient income or resources for healthy living, and by the generosity of redistributive social protection systems.

Poverty levels can be reduced through progressive taxation and welfare systems; the extent to which this happens is a political choice. Figure 3.9 shows trends in the distribution of household income, including benefits, in the United Kingdom from 1978 to 2007/8 (Jones et al. 2009). The share enjoyed by the top 20 per cent increased rapidly from the late 1970s to the early 1980s from about 38 per cent to about 42 per cent of total income, then remained more or less constant. By contrast, the share enjoyed by the bottom 20 per cent declined from about 8 per cent of total income to 6 or 5 per cent and stayed there. The dotted line shows that taxation had no redistributive effect during this period. From 1997 the Labour government used the benefit system for redistribution (not shown in figure) (Marmot Review 2010).
In countries where the tax system is weak and revenue from direct taxation is low, more reliance is placed on other sources, including government borrowing and receipts from trade tariffs, to provide for government expenditure on public services. Low-income developing countries may be in weaker positions relative to countries with stronger economies to negotiate fair economic agreements. The CSDH argued that the impacts of economic agreements on health equity need to be assessed and taken into consideration in trade and investment negotiations (CSDH 2008).

Other sources of funding for public services in a number of developing countries come from multilateral and bilateral development assistance and debt relief. Notwithstanding agreement among donor countries to commit 0.7 per cent of GDP to official development assistance (ODA) and achievement of this by some countries, the overall level of ODA falls far short of this commitment as assessed by donor countries’ combined gross national income (Figure 3.10).

**Market responsibility**

Markets can bring health benefits in the form of new technologies, goods, and services and improved standard of living. But the marketplace can also generate negative conditions for health, including economic inequalities, resource depletion, environmental pollution, unhealthy working conditions, and the circulation of dangerous and unhealthy goods.

(Marmot et al. 2008: 1666)
Examining one of these disbenefits to health, economic inequalities, it is noteworthy that income inequality has been increasing in a number of advanced market economies. An analysis of long-term trends in labour market income before taxes in the United States showed how income inequality has risen over the past 30 years (Saez 2009) (Figure 3.11). This has been driven by a steady increase in the remuneration of top earners while incomes of lower-level workers have remained largely static. The proportion of total income paid to the top 10 per cent has increased from 34 per cent to 50 per cent over the last 30 years. Figure 3.11 shows that the top one per cent has taken its share of total income from roughly 9 per cent to 24 per cent over this period.

The main reasons for this trend have been the globalization of labour markets, reduction of the power of workers’ unions, and broad social acceptability of income differentials (Saez 2009). Social movements in the United States and elsewhere have vociferously questioned the extremes of income inequality (Economist 2011).

Studies by Richard Wilkinson and Kate Pickett have examined the relationships between income inequality and a number of health and social outcomes in high-income countries and observed that higher income inequality is associated with lower life expectancy, higher child mortality, worse child well-being, higher rates of crime, and lower levels of trust between groups in society (Wilkinson and Pickett 2009).

Amartya Sen provided an insight into the link between income inequality and health: ‘Relative deprivation in the space of incomes can yield absolute deprivation in the space of capabilities’ (Sen 1992). Income inequalities may contribute to poor health outcomes through various mechanisms, for example, richer groups can afford to pay for private services in health and education, thus tending to residualize public services accessed by poorer groups.
Gender equity

Inequalities in economic, political, and social power between men and women are important determinants of health for women and men.

Gender inequality damages the health of millions of girls and women across the globe. It can also be harmful to men's health despite the many tangible benefits it gives men through resources, power, authority and control. These benefits to men do not come without a cost to their own emotional and psychological health, often translated into risky and unhealthy behaviours, and reduced longevity.

(CSDH Women and Gender Equity Knowledge Network 2007: xii)

The roots of gender inequality lie in entrenched social and cultural norms that assign differential values and roles to men and women. Legislation to enforce the political, social, economic, and cultural rights of women has contributed to improving gender equality in many parts of the world. But many challenges remain, including gender inequalities in education, work, property ownership, and political participation.

Education of women and girls is seen as key to empowering women. Among women, evidence shows that more education delays marriage and leads to fewer children. Good quality education has other benefits for girls, building decision-making skills that enable them to have more control over their lives, to work outside the home and become economically independent, and plan for the future. Figure 3.12 shows how education contributes to gender relations between men and women with consequences for women's health and well-being. While there was great variation between countries,
within countries women with more education were less likely to believe that a husband is justified in hitting or beating his wife if she refuses to have sex with him (MEASURE DHS 2011).

The health of men can also suffer as a result of effects that flow from gendered roles. In Russia, following the social upheaval that followed the collapse of the Soviet Union, men experienced higher mortality rates and alcoholism than women (Shkolnikov et al. 2001). This affected men with lower education in particular, leading to a widening of the gap in life expectancy among men (Murphy et al. 2006).

**Political empowerment – inclusion and voice**

For communities to achieve the conditions for health, it is of fundamental importance that mechanisms exist for full inclusion in decisions that affect them. Lack of voice in decision-making results from the exclusionary processes that drive inequalities, and lack of voice perpetuates inequalities. This is apparent in the histories of indigenous peoples in many countries (Indigenous Health Group 2007). While the health of indigenous peoples is well documented in some countries, including New Zealand, Canada, and Australia, relatively little data exist on the health of indigenous peoples in many parts of the world. ‘Where data do exist, indigenous peoples have worse health and social indicators than others in the same society’ (Indigenous Health Group 2007: 8).

One way to achieve better living conditions for disadvantaged communities is through processes that enable communities to control how local planning budgets are spent. This process, known as participatory budgeting, has been institutionalized in local governance in cities across Brazil over the last 25 years. The involvement of low socio-economic groups in the planning process through participatory budgeting has focused attention on their own priorities such as housing, education, street paving, and basic sanitation (IADB 2005).
Good global governance

The processes of globalization that have gathered pace since the 1970s have resulted in greater integration of markets and transnational flows of capital, goods, and services than ever before. Globalization affects the social determinants of health through its effects on employment and working conditions, urbanization, and availability of food, water, fuel, and essential medicines and on health systems (CSDH Globalization Knowledge Network 2007).

It is increasingly apparent that many processes that affect national populations are ungovernable by one country acting alone (Bell et al. 2010). Attempts by European countries to respond to the economic crisis in 2011 provide a notable case study in international decision-making. More broadly, the effects of climate change on human populations and broader biosystems require a globally consistent response.

Good global governance implies global decision-making forums that enable participation by all countries on an equitable basis. 'It is only through such a system of global governance, placing fairness in health at the heart of the development agenda and genuine equality of influence at the heart of its decision-making, that coherent attention to global health equity is possible' (CSDH 2008: 19).

Measure and understand the problem and assess the impact of action

Knowledge in itself is a powerful determinant of health and health equity – for example in the form of data about the distribution of health and the social determinants of health. Knowledge and values of social justice are the touchstones for effective action on social determinants of health. Lack of data often translates into lack of recognition that action should be taken.

In order to monitor progress in improving health and tackling health inequities, it is essential that data is disaggregated by sex, ethnicity/race, socio-economic status, and other social stratifiers. This applies to data systems at collected local and national levels, as well as to research projects (CSDH 2008).

Moving forward

Following the World Conference on Social Determinants of Health, held in Rio de Janeiro in October 2011, the political context became ripe for action. The Rio conference took forward the work of the WHO Commission on Social Determinants of Health by bringing together ministers and representatives from governments, UN agencies, the private sector, civil society, and academia to discuss how to align priorities and to commit to action on the social determinants of health.

The analysis and recommendations made by the CSDH have already helped to consolidate work by public health advocates in many countries and has stimulated a global movement for health equity (Marmot et al. 2011). A growing number of stakeholders in regions, countries, and local areas are examining the social determinants of health in their own context and what can be done to diminish social inequality in order to improve public health and reduce health inequities. Brazil established its own commission on social determinants of health in 2007. In the United Kingdom, the government commissioned the Strategic Review of Health Inequalities (Marmot Review...
2010), which translated the CSDH recommendations into the English context. Many local areas in the United Kingdom, as well as third-sector organizations and institutions, have applied the analysis made by the Marmot Review to guide their strategies. Action on the social determinants of health is taking place around the world, including in Chile, Argentina, Brazil, Costa Rica, Australia, other countries in the Asia-Pacific region, and in Europe (Marmot et al. 2011).

The political declaration made by heads of government, ministers, and government representatives at the Rio conference expressed 'determination to achieve social and health equity through action on social determinants of health and well-being by a comprehensive intersectoral approach' (WHO 2011: 1). The global movement for health equity that has gathered momentum following the CSDH must ensure that governments move beyond rhetoric to reality.

References
SOCIALL INEQUALITIES


