Introduction

Health inequalities and the importance of the social determinants of health

In 2008, the Commission on Social Determinants of Health (Commission on the Social Determinants of Health, 2008) reported on global health inequalities and priorities for action. Since then, two reviews have been written on health inequalities: one within the UK (The Marmot Review Team, 2010) and one for the WHO European region (The Institute of Health Equity, 2013).

These reports describe the avoidable inequalities in health and length of life both within and between countries. For example, there is a difference of 17 years in life expectancy within the London Borough of Westminster (The Marmot Review Team, 2010) and also a difference of 17 years in male life expectancy between the richest and poorest countries in Europe (The Institute of Health Equity, 2013). Globally, there is a difference of 36 years between the life expectancy of Sierra Leone (47 years) and Japan (83 years) (World Health Organization, 2013). In many countries, there are even larger differences in “disability-free” or “healthy” life expectancy – the number of years a person can expect to live in full health.

These differences occur because people with a higher socioeconomic position live longer and spend more of their life in good health. The key underlying theme to all the reports is that inequalities in health and mortality are not simply a result of genetic variation, or access to health care, important as these are, but that health inequities arise from the conditions in which people are born, grow, live, work,
and age and inequities in power, money, and resources that give rise to these conditions of daily life. In order to reduce health inequalities, the evidence-based reports make a number of specific evidence-based recommendations, conceptualized around the life course (see Figure 1.1), which group around the following themes:

- Giving every child the best start in life
- Ensuring good education and enabling all to take control over their lives
- Access to employment and “good jobs”
- Ensuring a sufficient income for healthy living
- Ensuring access to green and sustainable environments
- Placing more focus on ill health prevention
- The need to act across the whole gradient (proportionate universalism)
- A focus on human rights and equality issues

**Figure 1.1** A Life Course Approach to Tackling Inequalities in Health. Source: © The Institute of Health Equity, 2013.

Given the emphasis of this book, we are going to focus on inequalities in the working-age population and the role that work can play, both as a positive and negative social determinant of health. However, it is important to note that social determinants start to influence outcomes from the prenatal period, through childhood, and into education. By the time people are of working age, they may already be unable to make the most of the opportunities available given the cumulative disadvantage that may have built up over their lifetime. Action to give children the best start in life and to ensure good education for all will improve the economic prospects of the working-age population and help build a stronger foundation for mental and
physical health. These aspects are covered in more depth in the full reviews (Commission on the Social Determinants of Health, 2008; The Institute of Health Equity, 2013; The Marmot Review Team, 2010) and in a specific piece of work on children’s outcomes (Pordes-Bowers, Strelitz, Allen & Donkin, 2012).

Actions and policies focused on the working-age population will also have an effect later on in the life course. As workers retire, the health impacts of their working life, and the level of economic security which they have been able to achieve, will influence their lives in older age. Additionally, increases in longevity and rising pension ages mean there are more people of older age within the workforce and, therefore, more people in the workforce with limiting illnesses and disabilities. It must be ensured that these workers have access to the infrastructure they need to remain in, or be able to return to, work (The Institute of Health Equity, 2013).

The social gradient

In every country, health-adverse material and psychosocial conditions of work and employment are unequally distributed. Those with a higher level of education, income, and a better labor market or occupational position are more likely to be employed and more likely to have better work and employment conditions, which will, in turn, result in better physical and mental health outcomes (Siegrist, Rosskam & Leka, 2012). The following evidence on the effects of employment on health often shows a graded distribution of harm across society. Similarly, there are differences between countries. In general, higher levels of employment and good quality work are more common in higher income countries.

The Nature of Employment Across the Globe and Associated Health Effects

Employment and high-quality work are critically important for population health and health inequalities in several interrelated ways, and the following list summarizes the importance of work to health:

1. Participation in or exclusion from the labor market determines a wide range of life chances, mainly through regular wages and salaries and social status. Deleterious economic conditions can negatively impact on employment rates.
2. Material deprivation, resulting from unemployment or low-paid work and feelings of unfair pay – such as high levels of wage disparities within organizations – contributes to physical and mental ill health.
3. Occupational position is important for people’s social status and social identity, and threats to social status from job instability or job loss affect health and well-being.
4. An adverse psychosocial work environment defined by high demand and low control, or an imbalance between efforts spent and rewards received, is associated with an increase in stress-related conditions.
4 Donkin, Allen, Allen, Bell, & Marmot

5. Experiences of discrimination, harassment, and injustice aggravate stress and conflict at work, especially in times of high competition and increasing job insecurity.

6. Exposure to physical, ergonomic, and chemical hazards at the workplace, physically demanding or dangerous work, long or irregular work hours, temporary contract and shift work, and prolonged sedentary work can all adversely affect the health of working people.

7. Lack of work, inflexible, or stressful work can not only damage workers health but also have an impact on children, exacerbating the intergenerational transfer of disadvantage.

The following sections look into each of these in more detail. Some of these areas will also be the focus of other chapters in this book, and so we simply provide some examples of why we believe these to be important global challenges.

Participation in or exclusion from the labor market

There is significant variation in working patterns across the globe. In developed nations, the majority (around 85%) of those employed are working for wages, whereas in sub-Saharan Africa and South Asia, this accounts for less than 25% of workers. In the poorer regions, there is a higher percentage of own account (self-employed) and contributing family workers. The graph in the succeeding text illustrates these differences by showing the proportion of work of different statuses in 10 different countries. The percentage of workers employed in the formal compared to the informal economy varies significantly (Figure 1.2).

In 2012, there was a 55.7% employment rate (the proportion of people of working age who have a job) (International Labour Organization, 2013a). However, if we consider own account workers and contributing family workers, global unemployment has reached 5.9%. It has been rising since 2007 and is forecast to continue to increase by 8 million (up to 208 million) by 2015 (International Labour Organization & International Institute for Labour Studies, 2013). Rising unemployment is particularly an issue in high-income countries, 60% of which have experienced an increase in long-term unemployment over the last year (International Labour Organization & International Institute for Labour Studies, 2013).

Unemployment also occurs unequally across society, as those in lower socio-economic positions tend to be at higher risk of losing their jobs and/or failing to find new work. In most countries, those with a lower level of education also tend to be more vulnerable to unemployment. For example, in the 27 countries of the European Union, the unemployment rate was only 3.4% among those who went to university or had other tertiary education, but almost three times this rate, at 9.8%, for those who only had secondary education (Eurostat, 2012).

Unemployment tends to be bad for health. The graph in the succeeding text, based on data from the UK, shows that the male standardized mortality rate is significantly
higher for those who have been unemployed and that this applies across the social class gradient (Figure 1.3).

The increased mortality rate is likely to be caused by a range of factors, including the fact that unemployed people have increased rates of limiting long-term illness (Bartley, 2004), cardiovascular disease (Gallo et al., 2004, 2006), and mental illness. For example, in America, unemployed workers are twice as likely as their employed counterparts to experience depression, anxiety, psychosomatic symptoms, and other psychological problems (Paul & Moser, 2009). There is also evidence that unemployment impacts on health behaviors, resulting in increased smoking and alcohol consumption and decreased physical exercise (Maier et al., 2006). This, in turn, is likely to have negative effects on health.

The economic impact of a loss of earnings can also have a negative impact on health through a decrease in living standards, as well as a negative effect on self-esteem and general levels of well-being (The Institute of Health Equity, 2013). This can also affect the families of unemployed people.

There are both immediate and long-term health impacts of unemployment. The immediate impacts include the shock and stress of being made redundant (Stuckler et al., 2009), but negative impacts also increase with the duration of unemployment, meaning that those who experience long-term unemployment are likely to be the worst affected (Bethune, 1997).

Younger people tend to be disproportionately affected by rising unemployment. A recent ILO report showed that young people (aged 16–24) are almost three times
more likely to be unemployed than adults, with young women being particularly negatively affected (International Labour Organization, 2013b). In OECD countries, the number of young people not in employment, education, or training has been rising recently and has now reached 15.8% (International Labour Organization, 2013b). Unemployment among young people can have negative health impacts that stretch across the rest of their life course.

Economic change can affect large proportions of the workforce resulting in loss of work and poorer health. For example, the economic and social upheaval in Russia and other post-communist countries following the collapse of the Soviet Union in 1989 had demonstrable negative effects on population health (Stuckler et al., 2009). Male life expectancy in Russia in 2009 was still lower than it was in 1965; this is partly due to deaths from cardiovascular disease and injury as a result of increased alcohol consumption (The Institute of Health Equity, 2013).

The current economic crisis is also predicted to have wide-ranging adverse health effects (Marmot & Bell, 2009). Stuckler and Basu’s recent book *The Body Economic* outlines the health effects of the recession, particularly in countries that have pursued austerity policies. Greece, for example, has experienced a 52% rise in HIV, a doubling in suicide, rising homicides, and a return of malaria (Stuckler & Basu, 2013). Similarly, our work on the likely effects of the economic downturn on health in London finds that it is likely that there will be more suicides, more homicides and domestic violence, an increase in mental health problems, and worse infectious disease outcomes (Bloomer et al., 2012). These effects are partly as a result of increasing unemployment, decreasing security of employment, and insufficient income in employment.

It is the responsibility of governments, businesses, and other organizations to protect workers against these impacts wherever possible. One way to protect health is to ensure strong social protection policies. There is evidence that in countries with weak social protection systems, there is a greater fluctuation in mortality rates across economic cycles (Gerdtham & Ruhm, 2006; Stuckler et al., 2009).

**Material deprivation and pay**

Another global issue is that work does not ensure economic security. In 32 developing countries, 23 million of the 209 million wage earners were earning less than US$1.25 a day, and 64 million were earning less than US$2.50 a day (International Labour Organization, 2013c). The regional variation in the working poor is significant, and people in this form of severe poverty are not found in the developed world. Those working in subsistence activities are also more likely to be earning these very low amounts – four out of five workers in extreme poverty (below US$1.25 a day) live in rural areas, and 68% are employed in the agricultural sector (Kapsos & Horne, 2011). Insufficient income from work will often prevent workers from achieving a healthy life and leave them vulnerable to increased morbidity and mortality.

However, this is not to say that all those living in developed nations earn enough to live a healthy life. For example, in the UK, over half of those who are in poverty are in work. The proportion of children in poverty belonging to working families has risen from 30% in the mid-1980s to 60% in 2012 (Aldridge, Kenway, MacInnes & Parekh, 2012). Insufficient income will not only impact on the health of the workers but will also have a knock on effect on their local economies and families.

Unfair pay is also an issue. Since 2003, there has been a decrease in real wages for one-third of European workers, and two-thirds have seen their wages grow at a lower rate than their labor productivity (Franzini & Pianta, 2009). This is particularly the case for low-income workers. The figures demonstrate an increasing discrepancy between workers’ effort and their pay (or reward). This is discussed further in Section 4 – Adverse Psychosocial Work Environment.
Social protection policies have an important role to play in ensuring that the working-age population has sufficient resources to survive in times of unemployment. However, they are increasingly being utilized to subsidize low pay and are not just for those who do not work. This stretches the budgets, minimizing the amounts available to those who need it most. Where companies are doing well and senior executive pay is particularly high, it seems rather perverse that tax payers should subsidize their workers on low pay. Data from the ILO shows that workers’ share of national income has decreased in most countries. More money is going to profits, to be distributed to shareholders, and less to workers (International Labour Organization, 2013c). New structures to prevent this need to be explored. Further consideration of the benefits of good social protection policies to prevent poverty is given in our full reports (Commission on the Social Determinants of Health, 2008; The Institute of Health Equity, 2013; The Marmot Review Team, 2010).

Occupational position

Most of the world’s workforce, particularly in low- and middle-income countries, operate within the informal economy. Informal employment tends to be temporary (e.g., seasonal work), and those in temporary work tend to be exposed to a lack of statutory regulation to protect working conditions, low wages, and poor-quality occupational health and safety. Workers also tend to be excluded from benefits schemes (such as pensions) and receive very little social protection.

Being part of the formal economy is generally more advantageous in terms of socio-economic position and rights; however, the increasing power of large transnational corporations and international institutions to determine the labor policy agenda within countries has led to disempowerment of workers, unions, and those seeking work; and a growth in health-damaging working arrangements and conditions (Benach, Muntaner & Santana, 2007). Indeed in higher income countries, there has been a growth in job insecurity and precarious employment arrangements, as well as an increase in intensity of work and long working hours and a weakening of regulatory protection. In Italy, for example, atypical employment grew from 6% (of all employed people) in 1970 to 18% in 2000 (The Institute of Health Equity, 2013).

There is comprehensive scientific evidence on increased risk of poor mental health resulting from precarious employment (e.g., informal work, non-fixed term temporary contracts, and part-time work) (Artazcoz, Benach, Borrell & Cortes, 2005; Kim et al., 2006). The security of work has also been shown to have an impact on mental and physical health. A 2012 study found that perceived job insecurity predicted much higher odds of fair or poor self-reported health, depression, and anxiety attacks. These effects still occurred even controlling for sociodemographic characteristics, previous health problems, temporary work, or recent job loss (Burgard, Kalousova & Seefeldt, 2012). Other studies (Ferrie, Shipley, Stansfeld & Marmot, 2002) have also found adverse effects on physical and mental health as a result of work insecurity. Insecure jobs can also make it harder for workers to ensure economic stability for their families.

Our work on the effect of the recession in London also shows that the numbers who are in part-time work as a ratio to those who are in full-time work have
increased, and there has been a decline in real wages (Bloomer et al., 2012). A recent increase in involuntary temporary and part-time employment has also been noted across most advanced economies, particularly in those countries that have managed to prevent a further increase in unemployment (International Labour Organization & International Institute for Labour Studies, 2013).

Finally, social status is partly determined by occupational status and position and can affect health. Good quality paid work can provide individuals with experiences of learning, achievement, and performance, which, in turn, improve their social status and increase feelings of self-efficacy and self-esteem. On the other hand, insecurity, demotion, or other negative experiences at work can create feelings of anxiety, anger, and helplessness associated with a perceived low social status. These divergent experiences often contribute to positive health outcomes (for good work) and negative health outcomes (for insecure or negative experiences at work) (Siegrist, Rosskam & Leka, 2012). Status inconsistency is a discrepancy between skills and demand – for example, those with a high level of skills and qualifications experiencing limited demand and control at work. This results in increased chances of stress-related disorders (Siegrist, Rosskam & Leka, 2012).

Adverse psychosocial work environment

Not only are there negative health effects from unemployment, but there are also deleterious effects on health for those in employment. Firstly, as detailed earlier, the pay received and the type of work (formal/informal; secure/insecure) affect health, but there are also a range of psychosocial conditions of employment – including the level of control an employee has and the balance of effort and reward that are important for health.

An imbalance between a high amount of effort put into work and low reward is associated with an increase in stress-related disorders (European Commission, 2010). Data from Australia found that unemployed people and those in jobs that had low autonomy, high strain, and insecurity had equally bad health outcomes (Broom et al., 2006).

Psychosocial stress also follows a social gradient – the graph in the succeeding text shows the varying levels of psychosocial stress (measured by effort reward imbalance and low control) across different occupational classes, using data from 11 European countries (Figure 1.4).

Mental health problems (sometimes as a result of physical ill health) account for a large degree of work-related health problems in high-income countries. However, the WHO has also highlighted the growing issue of work-related stress and other psychosocial risks in developing countries (World Health Organization, 2007).

Discrimination, harassment, and injustice

Gender-related risk

In low-income countries, work-related health risks often differ between men and women. Despite a comparative lack of evidence, the WHO concludes that women in low-income countries are often involved in work that is physically demanding, which can have negative health effects. Regular exposure to dirty water and cooking on open
stoves can also cause sickness. Men experience more occupational accidents and violence at work than women and are often more exposed to extreme temperatures, chemicals, and other harmful conditions (World Health Organization, 2006).

Differences in male and female employment can also be seen in generally more developed areas – for example, in the EU, women are less likely to be employed than men but more likely to work part time (30% of women work part time in the region, compared to only 8% of men) (Eurostat, 2012). Often, women are forced to work part time due to reduced access to the labor market compared to men (Eurofound, 2012).

**Socially excluded workers**
As shown earlier, the health effects of work apply in varying degrees across all social classes. However, there are some in society that are further away from the workforce, for example, employment rates may be lower for migrants or for those who are disabled. In some countries, up to 80% of disabled people are unemployed, often as employers assume they will be unable to perform the necessary tasks that constitute the job (United Nations Enable, 2013). In India, 70 million people (5% of the population) are disabled. However, only 100,000 have found employment in industry (United Nations Enable, 2013).

Migrants in the labor force are often more vulnerable to exploitation, limited protection, and lower wages than citizens (International Labour Organization, 2004). Data has also shown that some vulnerable migrants, such as asylum seekers, find it particularly difficult to find employment. In 2005, the unemployment rate among refugees in the UK was six times the national average (Archer et al., 2005). On the other hand, those migrants who do find work often support families in their home countries. Global remittances totalled approximately $534 billion in 2012 (Migration and Remittances Unit Development Prospects Group, 2012).

**Figure 1.4** The Social Gradient of Adverse Psychosocial Work Environments (Effort–Reward Imbalance and Low Control) by Occupational Class.

In addition, in some countries, non-standard work includes children working illegally, and migrants can be trafficked for the purposes of sexual exploitation. The health effects of these extreme forms of exploitation are particularly severe.

From the perspective of the social determinants of health, it is important to understand exclusion, vulnerability, and resilience as dynamic multidimensional processes operating through relationships of power. Previously, exclusion has too often been approached by focusing on the attributes of specific excluded groups. We would therefore advocate for efforts to focus on ensuring that people do not become excluded from the workforce, rather than a set of policies that are initiated once they are. This approach should also increase understanding of the processes at work and how these might be reversed and shift the focus from passive victims towards the potential for disadvantaged groups to be resilient in the face of vulnerability (The Institute of Health Equity, 2013).

Exposure to physical, ergonomic, and chemical hazards

There are also material work-related health risks, including injuries, carcinogens, airborne particulates, ergonomic stressors, and noise (World Health Organization, 2009). Damaging physical conditions at work include experiencing noise, vibrations, heavy lifting, chemical hazards, or tiring positions. Levels of exposure to these risks have not significantly diminished in the last 20 years and tend to be experienced by men, with few qualifications, working in manufacturing and other construction jobs (Eurofound, 2012). These conditions often result in increased sickness absence (Chandola, 2011) and disability pensions (Blekesaune & Solem, 2005), reflecting the overall increased morbidity and mortality associated with hazardous work (Aldabe et al., 2011).

These have varying levels of incidence globally. In higher income countries, musculo-skeletal disorders (MSDs) make up a greater proportion of work-related illnesses – for example, in the European Union, MSDs account for nearly half of all absences from work and 60% of permanent work incapacity (Bevan et al., 2009). People of lower socio-economic position, those who have less educational qualifications, or those in jobs with a low level of skills tend to be more highly exposed to dangerous working conditions (World Health Organization, 2007).

Impact on children

Although we have not discussed the early years of life in depth in this chapter, we do need to acknowledge the role of employers and societal systems in ensuring that future generations grow up to be as fulfilled and productive as they can. After all, employers need workers and workers become parents. At the very least, in order to enable everyone to have the opportunity to work, we need to ensure universal access to high-quality, affordable early years education and childcare systems. Access to high-quality early years provision and education is an essential bedrock in leveling social inequalities in educational attainment, reducing
poverty, and promoting gender equity, for childhood and beyond. Workplaces and governments should do all they can to encourage such provision and to support employees in their important role as parents of the next generation of workers.

However, the importance of supporting workers as parents goes deeper than merely ensuring that children are looked after well by others so that people are free to work. Flexible working practices and supportive working environments that protect workers’ mental health are important so that parents can spend sufficient quality time, free from work stresses, with their children. Work stress and low income significantly impact on workers’ mental health, and poor parental mental health has a serious negative impact on children’s health and well-being and their future outcomes. Impacts of maternal depression on children include delayed language development, greater levels of misconduct, reduced social and emotional competence, sleeping problems, physical ill health, and lower levels of attachment with its associated detrimental effects (Smith, 2004).

This is not an argument for one parent staying at home. While such an arrangement is common, given the traditions and the cost of childcare, it is not proven to be better for children, and can be disempowering for women. In addition, given average wage levels, it is often not possible. Instead, we need to wake up to the notion that both parents might need or want to work and build better systems and support to recognize this reality.

### Priorities for Action

Every country should aspire to reduce exposure to unhealthy, unsafe work and strengthen measures to secure healthy workplaces, as well as taking action to minimize both unemployment and the negative health effects that are caused by being out of work.

The following priorities for action are adapted from the Commission on the Social Determinants of Health Report (Commission on the Social Determinants of Health, 2008) and the European Review on the Social Determinants of Health (The Institute of Health Equity, 2013).

### Strengthening employment opportunities

1. Full and fair employment and decent work should be made a shared objective of international institutions and a central part of national policy agendas and development strategies, with strengthened representation of workers in the creation of policy, legislation, and programs relating to employment and work.

2. Countries with rising levels of unemployment among the young should seek to counteract this by creating employment opportunities and ensuring they take up good quality work through education, training, and active labor market policies.
Ensuring sufficient income for healthy living

3. Social protection policies should be in place to protect the most vulnerable, but care should be taken to utilize these budgets to best effect. Social protection should not incentivize employers to pay low wages. National governments should develop and implement economic and social policies that provide secure work and a living wage that takes into account the real and current cost of living for health.

Decent work

4. Governments should reduce insecurity among people in precarious work arrangements including informal work, temporary work, and part-time work through policy and legislation to ensure that wages are based on real cost of living, social security, and support for parents.
5. Public capacity should be strengthened to implement regulatory mechanisms to promote and enforce fair employment and decent work standards for all workers.
6. There should be a reduction in the burden of occupational injuries, diseases, and other health risks by enforcing national legislation and regulations to remove health hazards at work.
7. At the international level, we should intensify and extend the transfer of knowledge and skills in the area of work-related health and safety from European/international organizations, institutions, and networks to national organizations.
8. Employers should be required to improve psychosocial conditions in workplaces characterized by unhealthy stress levels.
9. Occupational health and safety policies and programs should be applied to all workers – formal and informal – and the range be expanded to include work-related stressors and behavior as well as exposure to material hazards.
10. Society should maintain or develop occupational health services that are financed publicly and are independent of employers.

Economic conditions and policy responses

11. In low- and medium-income countries, measures of economic growth, in accordance with an “Environmental and Sustainability Strategy”, that are considered most effective in reducing poverty, lack of education, and high levels of unemployment should be prioritized. To achieve this, there needs to be an investment in training, improved infrastructure and technology, and extension of access to employment and good quality work throughout major sectors of the workforce.
12. In high-income countries, a high level of employment, in accordance with principles of a sustainable economy, needs to be ensured, without compromising standards of decent work and policies of basic social protection.
Vulnerable and excluded workers

13. Protection of the employment rights of, and strengthening of preventive efforts among, the most vulnerable (in particular, those with insecure contracts, low-paid part-time workers, the unemployed, and migrant workers) is important.

Proportionate universalism

14. A “proportionate universalism” approach should be adopted. Action on the social determinants of health, including employment and unemployment, should occur for all members of society but targeted progressively more towards those with higher levels of need – those lower down the “social gradient”. If approaches are successful in this approach, the “gradient” in health outcomes should be levelled up, meaning that everyone’s health outcomes improve, moving towards those of the most advantaged.

Changing values and ethics

15. A key stepping stone to improving working conditions is to promote a more “worker-friendly” culture within business. Efforts to change the articles of association for businesses to enshrine fairness and responsibility into business ethics, for example, could be effective in driving forward such a culture particularly in the current context where the current inequities of the system are being written about on a daily basis (newspaper articles relating to squeezes on income, bankers’ bonuses, chief executive payouts, and unsatisfactory working conditions in low- and middle-income countries proliferate).

Conclusion

Avoidable and unjust inequalities in health exist in every society, and reducing these inequalities is a matter of fairness and social justice. The conditions in which people are born, grow, live, work, and age influence morbidity and mortality along a social gradient – those with more resources, opportunities, control, and support are more likely to live longer, healthier lives.

Generally, unemployment tends to have a negative effect on physical and mental health. Being in work can protect and enhance health, but in order for this to occur, it must be “good” work. This is characterized by sufficient economic compensation, security and flexibility, and healthy physical and psychosocial working conditions. Good work should also offer opportunities for development and include vulnerable or excluded groups.

Globally, there is a variety in the types of work people are engaged in, and responses should, therefore, be modified depending on context. However, we have set out a list of priorities for action which provides guidance and direction to improve the effect that work has on the lives of everyone in society.
References


