

1.2 Debates about how health inequalities are conceptualized, measured, and monitored

This section provides a brief summary of the main ways in which health inequalities are conceptualized, particularly in terms of the indicators used to stratify health. It is by no means a comprehensive account but rather considers the ways in which researchers focusing on the UK have tended to conceptualize health inequalities over the past 30 years and some of the key challenges to these approaches (critiques which are developed later in the book).

1.2.1 Health inequalities research: Data and theory

Health inequalities research relies heavily on empirical data to demonstrate and explore differences in health status (see Chapter 2). The discipline of epidemiology (the study of patterns of health and disease in human populations using quantitative methods) has played an important role in this work, and continues to be vital in describing and monitoring health inequalities within and between populations. Indeed, the WHO Commission on the Social Determinants of Health (CSDH), targeted at a global audience, included the need to measure, understand, and monitor health inequalities as one of its three overarching recommendations (CSDH 2008).

The UK's position as a leading centre for health inequalities research owes much to its historically strong administrative data systems and to some pioneering epidemiologists. As early as the 1840s, researchers such as Edwin Chadwick used administrative data to demonstrate that those in manual occupations died an average of seven years earlier than tradesmen and 20 years earlier than the gentry (Chadwick 1842). The routine collection of data on mortality and occupation since the mid-nineteenth century has allowed generations of UK researchers to continue to examine the association between occupational class and health (Macintyre 1997), while data relating to residential location have provided health researchers with a proxy for social class in both the UK (Macintyre 1997) and continental Europe (Susser et al 1985).

While epidemiology has much to offer in describing health inequalities, it has perhaps been less helpful in understanding the *causes* of these inequalities. This partly reflects the quantitative nature of its methods (see also Chapter 18), but also reflects its links with clinical medicine and an associated tendency to focus on data relating to the behaviours and lifestyle of individuals rather than the broader structures and circumstances that shape such behaviours (see Chapter 8). Beaglehole and Bonita (2004), for example, criticize what they describe as epidemiology's implicit reliance on a theory of biomedical individualism and its lack of interest in the *social* drivers of health and disease. They caution against an

increasing tendency for epidemiologists to take a mechanistic view of health while neglecting the population perspective, linking this bias with an ideological emphasis on individual rather than collective responsibility (Beaglehole and Bonita 2004, p 145).

These tensions are evident in conflicting explanations for observed health differences. As Section 1.4 outlines, popular, empirically informed explanation for health inequalities stress the importance of 'upstream' factors, such as the social and economic context in which behavioural decisions and lifestyle exposures take place. In contrast, much epidemiological research focuses on individual factors in seeking to explain patterns of disease, thus emphasizing what are often regarded as poor, uninformed, or irresponsible lifestyle 'choices' or the part of those with worse health status (see Section 1.4, and Chapters 16 and 17). Such explanations often reflect the underlying (usually unstated) assumptions of the researchers, or limitations in available data (as this section considers further), and should therefore be treated cautiously.

1.2.2 Social class, socioeconomic position, and health

Social class, and the concept of 'general standing in the community based on occupational skill' (Bartley 2004, p 1), has a long history in the UK. More recently, health inequalities researchers in the UK have moved to a focus on socioeconomic position as the principal marker of social inequality. This shift reflects both the difficulties involved in measuring 'social class' and its less widespread use in countries outside of Europe (Bartley 2004; Lynch and Kaplan 2000). However, it has also been criticized as a move away from an explicit focus on the unequal distribution of power within society.

Various indicators of social class and social position exist, most of which focus on occupational classifications and/or indicators of income, wealth, or educational attainment (Galobardes et al 2006). The complexity of social class and social position means that the indicators employed are inevitably imperfect proxies and, as Grundy and Holt (2001) point out, the choice of indicator(s) used is not often adequately reflected on, possibly hampering efforts to understand the underlying mechanisms via which social position affects health. Scambler and Higgs (1999) argue that a further implication of this tendency is that 'class' is often 'explained away' by authors focusing on 'class-constitutive' or 'class-associated' factors (income, occupation, housing status, etc.) rather than considering class as a 'phenomenon in its own right' (in a more sociological sense). In a review of the ways in which health is stratified in the UK and the USA, Krieger and colleagues (1997) argue that health inequalities researchers necessarily have to focus on these kind of class-associated factors since 'class' is not readily measured or quantified. Nevertheless, the authors note that social

class should be regarded as 'logically and materially prior to' socioeconomic position, which can be seen as the 'expression' of social class in terms of the distribution of material and prestige-based resources across society (Krieger et al 1997, p 346).

Despite the difficulties in pinning down precisely what 'social class' is, or how we might measure such an amorphous concept, there is now a clear consensus that those positioned higher up the 'class' gradient in Britain experience better health and life expectancy than those further down for many health outcomes (Bartley 2004; Graham 2009; Marmot 2004). This pattern is evident across the population, so that 'even comfortably off people somewhere in the middle tend to have poorer health than those above them' (Marmot 2006). Consequently, as Graham and Kelly (2004) argue, it is important to understand health inequalities as a continual social gradient, rather than as 'health gaps' which result from 'health deprivation' in poorer communities.

1.2.3 Area and health

An alternative means of conceptualizing health inequalities, and one which also has a long history in Britain (see Chapter 14), is to consider differences in health indicators between areas. In many instances, indicators of neighbourhood are used as another imperfect proxy for social position (see Tunstall and Lupton 2003). Whilst the existence of differences in population health between various areas of the UK is widely acknowledged, there are also important debates about *how* these differences are measured. The choice of scale at which geographically bounded data are drawn from inevitably influences findings; while comparisons of large-scale areas may obscure significant variations in health within those areas, a focus on health patterns within extremely small-scale areas may fail to capture variation between larger areas (see Wilkinson 2005). Further, as Chapter 14 explains, geographical approaches to health inequalities have tended to ignore the *historical* and *social* production of places.

1.2.4 Gender and health

A less common strand of health inequalities research involves considering health differences from a gendered perspective. Intrinsic to this research is a distinction between sex, which is biologically defined, and gender, which is socially defined (Annandale and Hunt 2000) and has important implications for the relative position of men and women in any given society (Ostlin et al 2001). This is not to say that health differences between women and men can be attributed proportionally to *either* the biological or the social; rather, the two elements interact in their impacts on health such that '[b]iological differences between

the sexes may be in part socially determined, while social differences arising from gender relations may also have a biological element' (Ostlin et al 2001, p 176). In other words, the impact of biologically defined differences (such as reproductive capacity) will differ depending on socially defined norms and structures, while differences in the socially defined roles and positions of men and women may relate to biological differences between them.

As well as considering gender differences in health, there has also been research interest in relation to how health is stratified *amongst* women, particularly as most of the research on health inequalities in Britain in the 1970s and 1980s tended to focus solely on variations in men's health (with married women, where they were included, being categorized according to their husband's class). From the late 1980s onwards, researchers began doing more to explore whether the same kinds of health differences were evident *amongst* women (e.g. Arber 1991; Bartley et al 1992), whilst also comparing health experiences between men and women. In most countries (including the UK), such research suggests that women have a longer life expectancy than men (Salomon et al 2013) but experience higher levels of many chronic health conditions (Borchers and Gershwin 2012).

1.2.5 Ethnicity, 'race', and health

While health inequalities research in the UK has historically focused on the role of class and social position, researchers in other English-speaking contexts have placed greater emphasis on ethnic inequalities in health. This is particularly true of inequalities research in the USA, but is also an important theme in Canada, New Zealand, and Australia—all former British colonies in which racial ideology has played an important role in the historical process of colonization and the establishment of contemporary societal norms and institutions (Armitage 1995).

In the US literature, the term 'race' is often used where UK researchers would use 'ethnicity' (just as 'disparities' is often used in place of 'inequalities') (Isaac 2013). The prominence of race within the US partly reflects its historic significance in the legal, political, and social development of US society, but also its long-standing use as a key demographic category (Williams 1997). Some health researchers in the USA have called for a shift away from the use of 'race' to 'ethnic group', but others argue that a continued focus on race is appropriate in understanding the important role of racism for health (and other) inequalities (Thomas 2013; Williams 1997). Ethnicity is a form of collective social identity that typically includes elements of language, culture, shared history, and common ancestry (Karlsen and Nazroo 2007; Williams 1997). Ethnic identity is socially constructed by both internal and external group membership; it involves

a complex and dynamic negotiation between those included in a particular ethnic grouping and the society in which that grouping has social significance. This identity is not fixed: on a broad level, the boundaries and terminology used to define ethnicity change with time and place; and on an individual level, the same person may identify with different ethnic identities in different social contexts and at different points in their life course (though official records often treat ethnicity as a single category—Aspinall and Song 2013).

The study of health inequalities in relation to ethnicity has historically been something of a speciality interest in British health research, although it is now becoming increasingly common (e.g. Chandola 2001; Davey Smith et al 2000; Nazroo 2006). The research that does exist suggests that most minority ethnic groups in Britain experience poorer health outcomes for many measures than their 'white British' counterparts (Nazroo 2006). This conclusion in itself can cause tensions; as Chaturvedi (2001) points out, research which emphasizes high rates of disease in minority ethnic groups can imply that such disease rates (and therefore the ethnic groups in question) are a problem.

1.2.6 Intersectionality

Although these various axes of inequalities are often studied in isolation, the reality of people's lived experiences involves ongoing intersections across all of these different axes. The concept of 'intersectionality' describes the multiple intersecting aspects of social identity and structure, particularly those associated with experiences of exclusion or subordination (Walby et al 2012). Originating in Black feminist critique, intersectionality is increasingly used in other areas of research to theorize the experience of simultaneously held identities with relevance for social position (Meer 2014). In relation to health inequalities, the concept of intersectionality has not yet been widely employed, but, as Chapter 7 explains, it offers a useful framework for understanding the multiple layers of advantage and disadvantage that have relevance for health and well-being. It recognizes that a single person has multiple aspects of identity (including social class, ethnicity, gender, sexual orientation, ability/disability) which have relevance for their relationships with others and with the structures and systems of power in society—and, therefore, for their health.

1.3 Trends in the UK's health inequalities over the past 30 years

Mortality rates in the UK, and across western and central Europe, have been improving for around 150 years (McCartney et al 2011). However, underlying the overall improvement in mortality rates, some specific causes of mortality

have increased markedly. For example, alcohol-related mortality increased dramatically during the late 1980s and early 1990s in the UK, in contrast to the improving trends in other parts of Europe (Scott-Samuel et al 2014). Increases were also evident in drug-related mortality, suicide, and violence over the same period (Mok et al 2012; Shaw et al 2002; WHO 2012).

Within the UK, mortality rates improved much more slowly in northern and inner-city areas than in the more affluent southern England (Hacking et al 2011), to the extent that in some areas mortality rates actually worsened (Norman et al 2011). Indeed, for young adults in Scotland there has been no improvement over the course of the last 30 years (Whyte and Ajetunmobi 2012).

The rise in spatial inequalities in health since the 1980s is also reflected in a rapid rise in mortality inequalities by occupational social class in England and Wales and by area deprivation in Scotland (Leyland 2004). Figure 1.1 shows that the absolute gap in mortality (as measured by the Slope Index of Inequality¹) between the least and most deprived postcode areas in Scotland remained high but stable between 1981 and 2001; whilst relative inequalities (as measured by the Relative Index of Inequality²) increased rapidly, leaving Scotland with the highest inequalities in western and central Europe (Mackenbach et al 2008; Popham and Boyle 2010). In England and Wales, life expectancy increased for all social class groups amongst males and females over time, but the increase was more rapid amongst the highest social classes (I + II) than in the lowest social classes (IV + V), such that the inequalities increased.

It has been argued that these trends reflect the neoliberal (small state, free-market orientated—see Chapters 9 and 12) policies that were adopted in the UK in this era (see Scott-Samuel et al 2014). This is supported by the fact that other countries which adopted neoliberal policies in this period also saw rises in health inequalities, such as the USA and New Zealand (Beckfield and Krieger 2009). These rises in health inequalities were not inevitable: from the 1920s to the 1970s in both the UK and the USA, inequalities in mortality declined (Krieger et al 2008; Thomas et al 2007).

1.4 Empirically informed theories for understanding health inequalities

The government-commissioned Black Report of 1980, which reviewed available evidence regarding health inequalities, provided a landmark analysis of social class differences in the health of the population in England and Wales (Black et al 1980). It remains a seminal document in health inequalities research, not only in the UK but also internationally (e.g. Cutler et al 2006; Lynch and Kaplan 2000). The Report's authors ultimately rejected explanations reliant

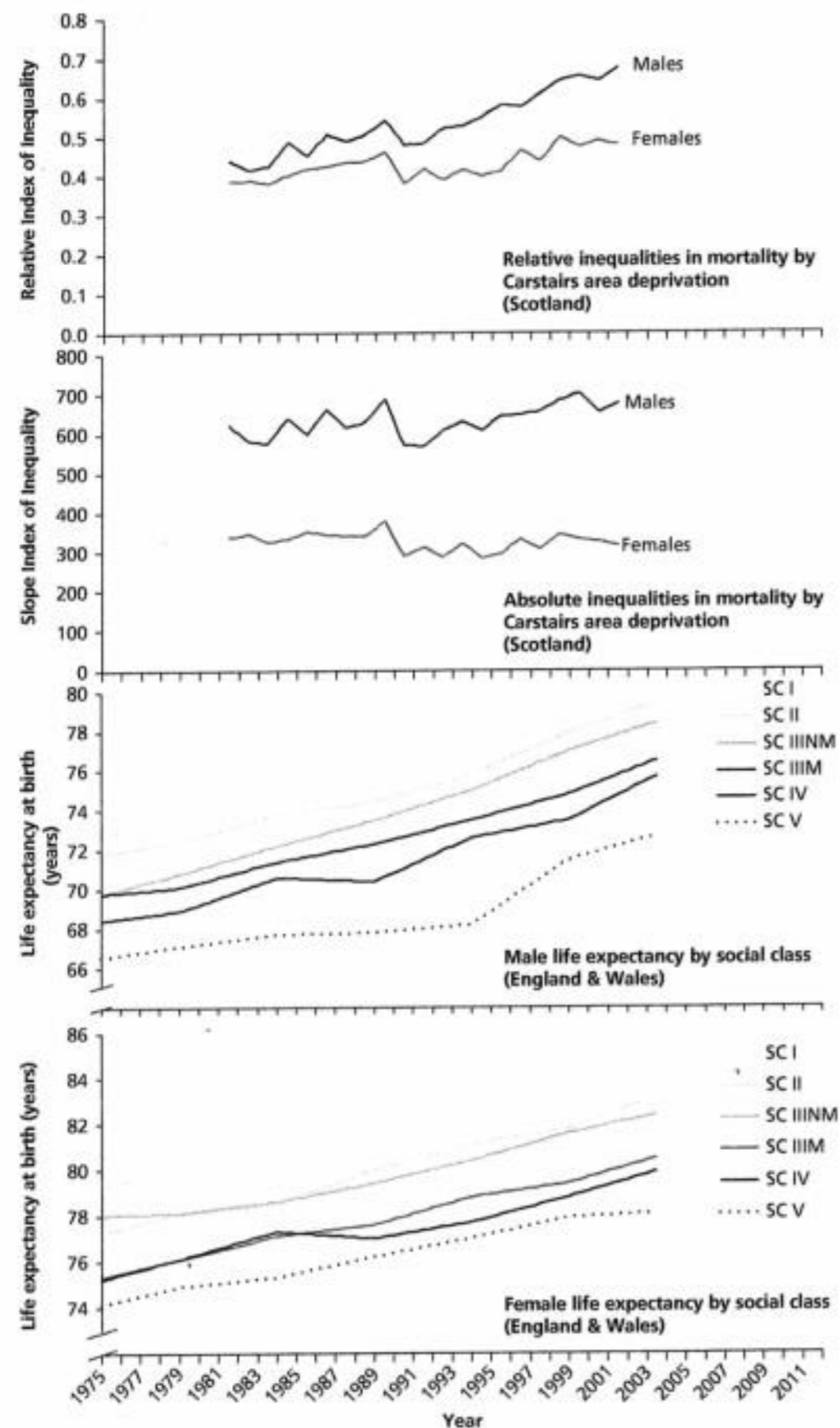


Fig. 1.1 Trends in health inequalities in England and Wales 1975–2003 (by occupational social class) and Scotland 1981–2001 (by Carstairs area deprivation).

Source: Data from National Records for Scotland and Office for National Statistics.

on artefact, biological, behavioural, and cultural factors, and instead focused their attention on 'class structure' and the extent to which this shapes people's access to health-promoting resources (Macintyre 1997).

More recently, additional theories of health inequalities have built on the explanations outlined in the Black Report, including psychosocial theories, the life course approach, and political economy (structural) accounts. The following sections briefly outline what appear to be the most popular empirically informed theories for explaining (socioeconomic) health inequalities evident in contemporary analysis.

1.4.1 Cultural-behavioural

The cultural-behavioural approach asserts that the link between social class and health is a result of class differences in health-related behaviours (e.g. smoking, alcohol and drug consumption, diet, physical activity, sexual behaviour, and health service usage). The 'hard' version of the cultural-behavioural approach asserts that health differences by socioeconomic class are wholly accounted for by differences in these unhealthy behaviours. The 'softer' version posits that behaviour is a contributory factor to the social gradient, but not the entire explanation (Macintyre 1997).

Although the Black Report (Black et al 1980) acknowledged that lifestyle behaviours contribute to health inequality patterns in the UK, it quickly rejected this as a sufficient explanation for health inequalities on the basis that lifestyle behaviours are significantly affected by the socioeconomic contexts in which people live. The notion that lifestyle behaviours are a symptom, as well as a cause, of health inequalities remains evident in most contemporary accounts of health inequalities (e.g. Bartley 2004; Graham 2009).

1.4.2 Materialist

Materialist explanations focus on how wealth and various goods and services that wealth enables, impact on health. By way of illustration, material wealth can enable greater access to health care, transport, an adequate diet, good-quality education and housing, and opportunities for social participation, all of which are recognized as promoting health. Material wealth also enables people to limit their exposures to known risk factors for disease such as physical hazards at work or adverse environmental exposures (such as mould and damp in housing or proximity to busy roads). However, public policies and services shape the extent to which key goods and services, such as schools, transport, and welfare, are dependent on wealth (Bartley 2004).

The materialist perspective was the one most supported by the authors of the Black Report and it is evident in a great deal of the research on health

inequalities that has been undertaken in the UK since (e.g. Davey Smith et al 2001; Whitehead 1987). Indeed, there now exists a significant consensus that material determinants of health do affect health and, in this sense, the materialist explanation remains a favoured explanation for health inequalities in the UK (Graham 2009). However, there have also been some important critiques of this explanation, one of the most common being that material approaches fail to fully account for why inequalities in health persist within countries where the material standard of living has significantly increased, such as the UK (Mackenbach 2012).

1.4.3 Psychosocial

The 'income inequalities hypothesis' suggests that, beyond a certain basic level of wealth, health is more closely linked to how egalitarian a society is than to national economic performance or specific levels of poverty. This hypothesis has contributed to an increasing interest in 'psychosocial' explanations of health inequalities (Wilkinson 2005; Wilkinson and Pickett 2009), which focus on exploring how social inequality makes people feel and the biological consequences of these feelings for health. For example, feelings of subordination or inferiority can stimulate stress responses which can have long-term consequences for physical and mental health, especially when they are prolonged (Bartley 2004). Consequently, addressing material factors alone (see Section 1.4.2) may not be sufficient to reduce health inequalities; what matters is how individuals value themselves in relation to others (i.e. people's perceived social status).

Much of the UK empirical research on psychosocial pathways focuses on the workplace and how a sense of control, security, and esteem influences health outcomes (e.g. De Vogli et al 2008; Marmot et al 1997). This is largely as a result of the findings of the highly influential Whitehall civil service cohort study, which found that occupational grade is inversely associated with incidence of coronary heart disease and related conditions (Marmot et al 1991, 1997), all-cause mortality, and non-coronary heart disease mortality (Marmot and Brunner 2005). Other well-known studies in this genre are informed by cross-national comparisons of indicators of income distribution (e.g. the Gini co-efficient) and of various health, and other social, outcomes (e.g. Wilkinson and Pickett 2009). Proponents of this approach argue that it addresses the key criticism of materialist accounts, helping to explain why surprisingly poor health outcomes persist in countries where the (overall) material standard of living has significantly increased (Wilkinson and Pickett 2009). Critics, in contrast, have challenged both the empirical basis of psychosocial accounts (e.g. Goldthorpe 2009) and the practical implications, arguing

that such approaches can unhelpfully shift policy attention away from the underlying material causes (e.g. Lynch et al 2000).

1.4.4 Political economy (structural) accounts

Political economy (or structural) accounts of health inequalities draw on materialist and psychosocial explanations, but highlight that these social determinants of health are themselves shaped by macro-level structural determinants: politics, the economy, the state, the organization of work, and the labour market (Bambra 2011; Doyal and Pennell 1979). Politics, and the balance of power between key political actors/groups, determine whether, for example, states provide collective interventions to reduce inequalities (as would be expected in a strong welfare state) and whether policy interventions are individually, environmentally, or socially focused. So in this explanation, health inequalities are politically and economically determined (Bambra et al 2005).

This explanation is supported by comparative research which suggests that advanced economies with different political and economic macro-policy environments have different levels of population health (for an overview, see Muntaner et al 2011). For example, Coburn's (2004) research concludes that those countries which were the least neoliberal in their economic and social policy orientation (notably the Scandinavian welfare states) had significantly lower infant mortality rates (IMR), lower overall mortality rates, and less mortality at younger ages. Similarly, studies by Navarro and colleagues (2003, 2006) indicate that long-term rule by Social Democratic parties results in better health outcomes than those with more neoliberal governments. There are, however, ongoing debates about the extent to which these factors help explain patterns of health *inequalities* within countries, as well as indicators of overall population health (see Brennenstuhl et al 2012).

1.4.5 Life course

One approach to understanding health inequalities which has held particular sway since the 1990s is the life course perspective. This is not, in itself, an aetiological explanation for health inequalities; rather, it is a perspective which suggests that it is essential for theories about the causes of health inequalities to consider the importance of timing and to think about the whole life course, rather than just particular points within it. Taking a life course perspective therefore involves considering the various risks that individuals are exposed to across their life courses, from foetal development through to old age (Barker 1995; Bartley 2004). This is particularly important for chronic diseases, many of which are known to have long latency periods (Lynch and Davey Smith 2005). Health inequalities are therefore understood to result from inequalities in the

accumulation of social, psychological, and biological advantages and disadvantages over time.

Within life course perspectives, the notion of critical social transitions has been used to explain how certain important changes in social status (e.g. entry into the labour market or movement between jobs) can have long-term consequences for health and future life chances (Blane 2006). Early childhood has been identified as a particularly crucial period for health across the life course. Indeed, using the 1946 birth cohort, Giesinger and colleagues (2014) found that circumstances in early life accounted for 74% of the subsequent socioeconomic gradient in mortality.

Longitudinal cohort studies suggest that disadvantage tends to cluster and accumulate over time (Blane 2006). In this way, individuals who are exposed to adverse conditions in one respect, for example work, are also more likely to encounter disadvantage in others, such as poor and damp housing or exposure to environmental pollution. Moreover, any disadvantage encountered in the past, such as unemployment, is likely to increase the chances of accumulating further disadvantage in the future.

1.4.6 The consensus around the need for 'upstream' changes

Health inequalities are a complex phenomenon and, as this section outlines, whilst research has informed a variety of popular theories concerning the underlying causes, there is no consensus that any one explanation satisfactorily explains their persistence over time and across a variety of contexts (Mackenbach 2012). Indeed, given the complexity of interactions between the multitude of factors known to impact on health, it seems doubtful that any one theoretical account could ever be sufficient.

This makes developing policy responses to health inequalities difficult. Nonetheless, there is a consensus amongst most researchers that the fundamental causes of health inequalities lie 'upstream', in the social, economic, and political environments in which we live and work. As such, interventions which aim to reduce health inequalities by changing people's lifestyle behaviours (without also changing the contexts in which they live and/or work) have been widely criticized by researchers (see Katikireddi et al 2013), not least because, as Lorenc and colleagues (2012) demonstrate, such interventions may unintentionally widen health inequalities. This happens where mechanisms for change (e.g. mass media campaigns) rely on individual decision-making, given it is usually easier to make positive lifestyle-behavioural changes when living in less stressful environments. In addition, as Chapters 15–17 discuss (see also Graham 2012), lifestyle-behavioural interventions can be stigmatizing, unfairly placing the responsibility for unequal patterns of poor health with those experiencing

the poorest health. Reflecting this, a recent survey of researchers working on health inequalities in the UK found the majority believed policies to tackle inequalities in income (via taxation and benefits) and social and environmental contexts (e.g. via public services such as schools) were most likely to reduce health inequalities (Smith and Kandlik Eltanani 2014).

