Chapter 11: Health and Disability

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Overview and key concepts

- Poverty, inequality and poor health have a long and closely entwined relationship in British history.

- Despite marked and continued overall improvements in life expectancy we can still observe health inequalities such that income and wealth have a marked influence on life and death.

- A range of data sources show evidence of social and geographical inequalities in Britain in terms of mortality, morbidity and disability.

- Health inequalities can be explained by a combination of materialist, lifestyle and psychosocial factors operating over the life course. The relative importance of these factors is disputed.

- Inequalities in health are further entrenched when there are inequities in the provision of health care.

- Policies which reduce poverty and inequality are key to tackling health inequalities. Social security policies have a vital role to play in ensuring adequate income levels.

Key concepts

Inequality, inequity, life course, morbidity, disability
Introduction: Inequalities in health in Britain – ingrained in history

The intimate and inextricable connection between poverty, inequality, wealth and health – that the poor are more likely to suffer sickness and to die young, whereas the wealthy are more likely to enjoy good health and longevity – is a theme that can be traced throughout British history. Across the 19th and 20th centuries, despite the economic, political and technological transformation of society, authors documented evidence of this relationship between poverty and ill health with notable consistency (see Davey Smith et al., 2001). Again and again the difficult living conditions of the poor were described and the impact on their health observed; the better life chances of the rich on the other hand were duly noted but rarely scrutinised.

In 1833 the Factory Inquiry Commission Report presented information on the working conditions of children in factories (see box 9.1). Legislation in that year prohibited the employment in mills of children under the age of nine; those under 18 could not work more than 12 hours a day. In 1845 Engels published The Condition of the Working Class in England where he documented and discussed the health consequences of capitalist industrialisation and urbanisation. In all areas of life the working class systematically faced the most treacherous conditions, or in Engels’ words “The workers get what is too bad for the property owning class” (Davey Smith et al., 2001:61) – living in dank overcrowded cellars, wearing worn-out clothes of the poorest quality, only able to buy the rancid and half-decayed food left over at market. For Engels this amounted to ‘social murder’ – “when society places hundred of proletarians in such a position that they inevitably meet a too early and an unnatural death” (Davey Smith et al., 2001:67).

Box 9.1 An extract from the Factory Inquiry Commission Report

That this excessive fatigue, privation of sleep, pain in various parts of the body, and swelling of the feet experienced by the young workers, coupled with the constant standing, the peculiar attitudes of the body, and the peculiar motions of the limbs required in the labour of the factory, together with the elevated temperature, and the impure atmosphere in which that labour is often carried on, do sometimes ultimately terminate in the production of serious, permanent, and incurable disease, appears to us to be established. From cases detailed in the evidence, and the accuracy of which has been strictly investigated, we do not conceive it to be possible to arrive at any other conclusion. The evidence, especially from Dundee and Glasgow, from Leicester, Nottingham, Leeds, and Bradford, from Manchester and Stockport, in a word, from all the great manufacturing towns, with the exception, perhaps, of those in the western district, in which there is little indication of disease produced by early and excessive labour, shows that grievous and incurable maladies do result in young persons from labour commenced in the factory at the age at which it is at present not uncommon to begin it, and continued for the number of hours during which it is not unusual to protract it.

In the 20th century whilst absolute living standards had generally improved, scholars, reformers and campaigners continued to present the realities of living in conditions of dire poverty to the public. In 1913 Maud Pember Reeves published *Round about a pound a week* which described how working class women cooked, washed, cleaned and scrimped to feed a family and how they coped with cold, damp, vermin and sickness (see Davey Smith et al., 2001). After one world war and on the eve of another, in 1939 Margery Spring Rice also documented the lives of *Working Class Wives*, revealing a picture in which “monotony, loneliness, discouragement and sordid hard work are the main features” (2001: 216) and “Happiness, like health, can suffer an almost unperceived lowering of standard, which results in a pathetic gratitude for what might be called negative mercies, the respite for an hour a day, for instance, from the labouriousness of the other eleven, twelve or thirteen” (Davey Smith et al., 2001: 216-7).

Undoubtedly, living conditions have improved substantially over the past two centuries (see chapters 2 and 6) and death rates have declined accordingly. Figure 9.1 shows life expectancy in the UK for males and females across the twentieth century, increasing some 30 years over this period and with improvements continuing to the present time.

**Figure 9.1 Improved mortality life expectancy over the twentieth century, males and females, UK**

![Graph showing life expectancy](image)

Source: Government Actuaries Dept (drawn by authors)

**Continued inequalities**

Despite overall improvements in life expectancy we can still observe health inequalities such that income and wealth have a marked influence on life and death.
One traditional method of looking at the ‘health’ of a population and to analyse inequalities is to look at mortality. Recent figures on UK life expectancy show that inequalities in mortality persist and even continue to widen. Figures for local authorities for 2003 to 2005 showed the highest life expectancy to be 82.2 years for men and 86.2 for women, in Kensington and Chelsea, one of the wealthiest parts of the country. The lowest figures were found in Glasgow, at 69.9 years for men (12.3 years lower than the highest) and 76.7 for women (a difference of 9.5 years) (National Statistics, 2006b). These figures demonstrate the very substantial differences in death rates across different parts of the UK. Referring to figures for previous years tends also to show the gap to be widening; life expectancy increases everywhere, but it increases most in those areas where it is already highest (Dorling et al., 2005).

Looking instead at morbidity – illness - the graph in figure 9.2 shows some results from the Whitehall II study, a longitudinal survey of white-collar civil servants in London. This demonstrates a strong trend of decreasing prevalence of self-reported poor health with increasing household income, for both men and women. It is interesting to note here that there is no obvious attenuation of the trend in the very high-income groups. Even the group with an average household income of £80,000 tend to fair worse than those in the highest income bracket.

**Figure 9.2 Age adjusted prevalence (%) of poor self-rated health in the Whitehall II study by household income band (1997-99).**

Source: adapted from Martikainen et al., 2003
Box 9.2: A minimum income for healthy living?

In the early 1930s, the British Medical Association appointed a committee:

“To determine the minimum weekly expenditure on foodstuffs which must be incurred by families of varying size, if health and working capacity are to be maintained, and to construct specimen diets”. (Hannington, 1937, p 198)

The report from the BMA’s committee found that the majority of the unemployed, and a reasonable proportion of the employed population, earned an income below this minimum expenditure. This was reflected in John Boyd Orr’s studies around the same time, which concluded that a healthy diet could only be achieved with an income level above that of half of the population (Boyd Orr, 1936).

A more recent study, inspired by the introduction of a national minimum wage (and the lack of any health input in setting its level), attempted a more comprehensive assessment of the minimum income required for healthy life in the UK (Morris et al., 2000). This assessment considered not only the costs of material sustenance such as nutrition and housing, but the expense of ‘psychosocial’ goods necessary for health and wellbeing, such as participation in social networks beyond the immediate family and telephone bills. In 1999 prices, the estimated minimum income (defined for a single young man) was £132 per week. This was compared to the wage that would be earned for a 38 hour working week at the minimum wage of £105 to £121 per week, or basic level social security payments of between £40 and £51 per week. Sixty or seventy years on, the findings were not so different to those of Boyd Orr and the BMA committee.

Morris’s figures have been updated with some allowances for inefficiencies, and were found to indicate that a single healthy man working a standard full-time week (37.5 hours) would, aged 18-21, still have an income approximately £20 per week less than the minimum required for healthy living. A man aged 22 to 24 would fare somewhat better, with weekly income around the minimum, whilst a man aged 25 to 30 and qualifying for working tax credits would exceed the minimum by £11 per week (Deeming, 2005).

The census provides a useful source of information on the nature and extent of inequalities in morbidity in the UK, especially given that it covers the vast majority of the population. In 2001, two questions were asked of each person about their health. The first asked the person to rate their general health over the previous twelve months as ‘good’, ‘fairly good’ or ‘not good’. The second asked whether the person had a long-term illness, health problem or disability that limits daily activities or work (a ‘limiting long-term illness’ or LLTI). Table 9.1 shows the prevalence of LLTI for all people aged 16-74 by their National Statistics Socio-economic Classification (NS-SEC, the occupational measure of socioeconomic classification that has replaced the Registrar General’s Social Class). The table clearly shows increasing prevalence of long-term illness with decreasing socioeconomic position as measured by NS-SEC (these are crude rates; age-standardisation makes very little difference to the pattern,
see National Statistics, 2006a). The prevalence of LLTI amongst people in higher managerial and professional occupations is around 6%; amongst those in routine occupations it is around 15%. The prevalence rates amongst those who have never worked and the long-term unemployed are even higher (although this is somewhat circular given that some people will have never worked or stopped working because of limiting long-term illnesses).

Table 9.1 Limiting long-term illness prevalence (%) by National Statistics Socio-economic Classification (NS-SEC), census 2001, England and Wales, all people aged 16 to 74.

<table>
<thead>
<tr>
<th>NS-SEC group</th>
<th>% with LLTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Higher managerial and professional occupations: Large employers and higher managerial occupations</td>
<td>6.3</td>
</tr>
<tr>
<td>1.2 Higher managerial and professional occupations: Higher professional occupations</td>
<td>6.3</td>
</tr>
<tr>
<td>2 Lower managerial and professional occupations</td>
<td>8.3</td>
</tr>
<tr>
<td>3 Intermediate occupations</td>
<td>8.8</td>
</tr>
<tr>
<td>4 Small employers and own account workers</td>
<td>12.5</td>
</tr>
<tr>
<td>5 Lower supervisory and technical occupations</td>
<td>11.5</td>
</tr>
<tr>
<td>6 Semi-routine occupations</td>
<td>12.3</td>
</tr>
<tr>
<td>7 Routine occupations</td>
<td>14.6</td>
</tr>
<tr>
<td>Never worked</td>
<td>39.9</td>
</tr>
<tr>
<td>Long-term unemployed</td>
<td>21.3</td>
</tr>
<tr>
<td>Full-time students</td>
<td>5.5</td>
</tr>
<tr>
<td>Not classifiable for other reasons</td>
<td>47.0</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

Source: 2001 census, commissioned table M194.

Measuring morbidity

There are many ways of measuring morbidity in a population. This can include looking at the prevalence rates of individual conditions that have been clinically diagnosed, such as diabetes. For some diseases, such as cancer, there are disease registers (see Box 9.3) which are useful tools for monitoring disease trends and analysing patterns or morbidity. The advantage of using data based on clinical diagnosis in this way is that it brings a high level of validity; ‘doctor diagnosis’ is considered to be the ‘gold standard’ of health status measurement.

Box 9.3 Four characteristics of disease registers

1. Registers are based on people not events.
2. People registered have a feature in common.
3. Information held about these people is updated in a defined and systematic manner.
4. The register is based on a geographically defined population.

Indirect measures of health status, such as number of consultations with a GP or use of hospital services, can also be used to analyses patterns of morbidity, although in these cases it is often the case that ecological rather than individual level analyses have to be performed. For instance looking at the relationship with area-level deprivation, as data on individual socioeconomic circumstances is often either of poor quality or absent from health services data of this kind. For this reason, health surveys are often used to look at socioeconomic inequalities in morbidity.

The data presented above in Figure 9.2 from the Whitehall II study (a longitudinal survey) and in Table 9.1 from the 2001 census (a survey of the whole population) are both based on self-rated measures of health whereby respondents are asked to give an overall assessment of their health in a single item. Versions of this have been used in surveys worldwide (Bowling, 2005). Although a single, and simple, question, with generally three or four response categories, this has been shown to be significantly and independently associated with specific health problems and the use of health services (Bowling, 2005). Self-rated health has also been shown to be closely associated with mortality.

**Figure 9.3** The association between the prevalence of limiting long-term illness in 2001 and life expectancy at birth 1999-2001 across Britain’s 406 local authorities.

Notes: Each local authority is represented by a circle with area proportional to population (the largest circles are the local authorities with the largest populations). Data sources: 2001 Census (LLTI, Standard Tables 16 and 65); National Statistics (life expectancy).

The graph in Figure 9.3 illustrates the potentially high value and validity of morbidity measures, since they can be very strongly related to objective measures of poor health, in this case death rates (expressed as life expectancy at birth). Local authorities with high limiting long-term illness (LLTI) prevalence tend to have lower life expectancy, and the association between the two is strong and linear. The LLTI prevalence
measure was calculated from data output from the 2001 Census, and is standardised to account for varying age/sex population mix across different local authority areas. Life expectancy figures are calculated by National Statistics based on mortality data from death certificates. Both measures are therefore derived from almost 100% count data (as opposed to survey samples), and are extremely reliable indicators. The close match between the two (correlation coefficient -0.83, p<0.001) also supports the validity of self-reported morbidity measures, since census data are derived from self-completed questionnaires.

Self-rated health measures such as these may not be clinically validated (although many who rate their health as poor will have formal diagnoses; similarly many people with a doctor’s diagnosis may not consider their health to be poor) but instead it is arguably a better reflection of people’s own subjective assessment of their health status. ‘Health’ as Blaxter (2004) has so eloquently discussed, is a slippery and complicated concept with multiple meanings.

Disability and poverty

Another approach to considering the distribution of health within a population is to look at disability, and its consequences, more specifically. As with morbidity, many different measures have been used, and there is a certain amount of overlap with chronic illness. The Health Survey for England is one source of data on the prevalence of disability. Its questions cover limitations in functional activities (seeing, hearing, communication, walking and using stairs) and in activities of daily living: getting in and out of bed or a chair, dressing, washing, eating and toileting. The prevalence of disability from this survey, by age group, is shown in Table 9.2. From this we can see that the prevalence of disability increases with age, with almost a quarter of the population experiencing moderate or severe disability by the age of 55-64, and a third of men and 42% of women aged 85 and over experiencing severe disability. Disability is not the preserve of the old, however, nor is it an inevitable consequence of ageing – over a quarter of those aged 85 and report no disability.

Table 9.2 Prevalence of disability (%) in the Health Survey for England, 2001

<table>
<thead>
<tr>
<th>AGE</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75-84</th>
<th>85+</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No disability</td>
<td>96</td>
<td>95</td>
<td>92</td>
<td>86</td>
<td>75</td>
<td>66</td>
<td>57</td>
<td>28</td>
<td>83</td>
</tr>
<tr>
<td>Moderate disability</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>18</td>
<td>25</td>
<td>39</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>Serious disability</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>14</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>WOMEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No disability</td>
<td>95</td>
<td>94</td>
<td>91</td>
<td>86</td>
<td>77</td>
<td>68</td>
<td>49</td>
<td>27</td>
<td>82</td>
</tr>
<tr>
<td>Moderate disability</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>17</td>
<td>23</td>
<td>32</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Serious disability</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>19</td>
<td>42</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Health Survey for England, 2001
Disabled people are more likely than non-disabled people to live in poverty; disability can be a cause and consequence of poverty. The poverty rate for disabled adults is 30%, twice that for non-disabled adults; the main reason for this is worklessness (Palmer et al., 2006), although it is the level at which social security benefits are set determines whether worklessness results in poverty. Not only are disabled people’s incomes lower, but their living costs are higher, further compounding their difficulties. Recent research conducted for the Joseph Rowntree Foundation has highlighted the additional costs of living that disabled people face in order to meet their needs (Smith et al., 2004). This research looked at what disabled people need in order to achieve a ‘level playing field’ with non-disabled people and constructed disabled persons budget standard totals. This included major expenditure on equipment essential for independence as well as ongoing higher expenses for items such as food, clothing, utilities and recreation. The disabled persons budget standard totals were compared to maximum benefit levels and it was found that even if receiving these maximum benefit levels disabled people still face a substantial shortfall in income – approximately £200 a week less than the weekly amount required for them to ensure a minimum standard of living. Policies that define the levels of benefits are again highlighted as being crucial in determining whether disabled people live in poverty.

Disability, and the poverty that is often associated with it, also has an impact on children. Table 9.3 shows child poverty rates for different forms of household composition. These figures show that a family that contains a disabled child or adult has a higher chance of being in poverty, and if there is both a disabled child and a disabled adult then poverty is even more likely. However, these figures have been coming into line with the rate for all children in recent years – although this is still markedly high at over a quarter (28%). For the most recent period for which data are currently available (2004/2005) the percentage of all children living in poverty was 27% (Palmer et al., 2006).

**Table 9.3 Trends in child poverty rates, by household composition**

<table>
<thead>
<tr>
<th>Composition of child population</th>
<th>Children in households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All children</td>
</tr>
<tr>
<td>1999/00*</td>
<td>32</td>
</tr>
<tr>
<td>2000/01</td>
<td>30</td>
</tr>
<tr>
<td>2001/02</td>
<td>30</td>
</tr>
<tr>
<td>2002/03</td>
<td>28</td>
</tr>
<tr>
<td>2003/04</td>
<td>28</td>
</tr>
<tr>
<td><strong>Composition of child population</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

* Figures exclude the self-employed
$ This figure is out of line with the trend and may reflect sampling or clerical error in the series.
Source: CPAG Poverty magazine Issue 123
As with mortality, geographical inequalities in the distribution of disability can be observed across the country. The map in Figure 9.4 shows the substantial geographical variations in the proportion of the working age population claiming incapacity benefit. It highlights that while much of southern England has social security claimant rates below 5%, these rates increase to the north and west of Britain. The highest rates are found in the deindustrialised cities of the north and Midlands, the valleys of south Wales, and in and around Glasgow.

**Figure 9.4 Proportion of the working age population claiming Incapacity Benefit, Great Britain, August 2005. Data source: Department of Work and Pensions Longitudinal Study.**

<table>
<thead>
<tr>
<th>% working age population claiming IB</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5.0</td>
</tr>
<tr>
<td>5.1 - 7.5</td>
</tr>
<tr>
<td>7.6 - 10.0</td>
</tr>
<tr>
<td>10.1 - 15.0</td>
</tr>
<tr>
<td>15.1 - 33.7</td>
</tr>
</tbody>
</table>

Notes: The areas mapped here are tracts, each of which is approximately half a parliamentary constituency; the tracts therefore have very similar populations. The map on the right shows the same information as that on the left, but is a cartogram – it affords each tract the same area on the map, and is a fairer representation of the data.

Recent government policy as outlined in the Welfare Reform Green Paper (*A new deal for welfare: Empowering people to work*, June 2006) aims to actively encourage and support disabled people to find work, reflecting the fact that many disabled people are keen to work. However, the proposals have been criticised for the reduction in the value of benefits that will be incurred if people do not engage in work-related activities. Furthermore, work is not necessarily a route out of poverty. The research conducted by Smith and colleagues (2004) described above found that
people with low-medium level needs would need to receive the national average wage before their costs would be covered (and this is without taking into account any costs for personal assistance).

Health and Wealth

Health inequalities have usually been studied with the poor and deprived as the groups of interest. In order to truly understand these inequalities, it is perhaps important to also understand the life circumstances and health experiences of those at the wealthy end of the socioeconomic spectrum. Deprivation indices and measures of poverty, such as the Townsend and Breadline Britain indices (See Shaw et al, 2007), have frequently been used to help us understand the nature of health inequalities. However, they are explicitly indices of poverty or deprivation, and those areas or populations at the ‘least deprived’ ends of the scales are just that; they cannot necessarily be said to be affluent or wealthy.

The dearth of studies of wealth and health has been highlighted only recently, along with the recognition that good quality wealth data is not easily available (Baum, 2005). This lack of wealth data should begin to be rectified with the advent of the National Statistics ‘Wealth and Assets Survey’, which began in mid-2006, and should give some insight into the details of wealth held in the UK, and could prove useful in investigating associations between wealth and health. Work has also been carried out to calculate small area wealth estimates, using a methodology and theoretical basis similar to the Breadline Britain poverty indices (Dorling et al., 2007).

The health circumstances of the affluent have been commented upon though. For example, in discussion of a report on variation in cancer survival rates across the UK, one of the authors commented that:

"Your chances depend on the area in which you live, and if the survival rates of all patients were as good as those achieved in affluent areas we would avoid many deaths." (Michael Coleman, quoted in Anderson, 1999)

There is little or no research that has specifically set out to investigate the mechanisms for better health amongst the wealthy. However, it is apparent in conceiving wealth as the opposite of poverty that similar mechanisms are likely to be involved. Where poverty implies a lack of resources to participate in material and social norms, wealth implies sufficient resources to exceed those norms. Affluence is likely to bring secure access to material necessities – healthy food, high quality housing, a relatively clean and spacious environment in which to live – and luxuries. It can also mean that the time and money required to participate in social networks and cultural experiences are not barriers. With wealth can also come the option to actually exclude oneself from societal norms, such as waiting on a list for health services. These clear advantages that are likely to be brought by wealth are all potentially associated with improved health and wellbeing.
What explains inequalities in health?

In advanced industrialised societies such as the UK – where poverty is a relative rather than an absolute condition and the National Health Service provides healthcare free at the point of access – we might reasonably ask the question: why, and how, does poverty still lead to poor health? Indeed, why is it that even at the high end of the income scale we see an association such that higher income is related to better health (Figure 9.2 above)? It is not just that poverty is related to the worst outcomes, but that inequalities in health can be observed across the entire social spectrum. Various explanations have been put forward and their relative importance is actively debated (see Bartley 2004 for a full discussion).

One of the explanatory factors is the materialist position, where it is argued that it is the material circumstances of living and working conditions that are vital in determining health outcomes. This includes factors such as the quality of housing and the safety of working conditions. Looking at the specific conditions and causes of death that can be attributed to the material environment, these have been estimated to account for about a quarter of all deaths (Bartley, 2004).

An alternative position is that it is not material conditions that lead directly to health inequalities but the different lifestyle choices made by people that are the key determining factor. The social class gradient in smoking is often cited as support for this position, as well as participation in leisure-time exercise and diets high in salt, fat and sugar. While this explanation is often seen as blaming the individual, an alternative stance emphasises the constrained choices that face many people living in difficult circumstances and the cultural identities associated with various patterns of consumption.

A more recent strand of explanation relates to psychosocial factors. Here the focus is on “how feelings that arise because of inequality, domination or subordination may directly affect biological processes” (Bartley, 2004: 80). Control over work, effort-reward imbalance, social support, position in the status hierarchy and ‘stress’ more generally are all areas which are receiving attention as possible explanations for health inequalities.

Epidemiological studies often focus on one set of explanatory factors and use statistical techniques to ‘control’ for a range of other confounding factors, using the logic of ‘all other things being equal’, for example, looking at the relationship between income and mortality controlling for smoking behaviour as if it did not vary by income. While necessary in an analytical sense, this approach encourages a particularist and inaccurate way of thinking about the social world. In reality, of course, these three explanatory factors outlined above, which are so often seen as competing against one another, are clustered together, such that, for example, people with low incomes tend to work in more dangerous jobs, are more likely to smoke and have lower levels of control over their work. These factors compound each other and accumulate over time. The life course perspective focuses on this issue of the accumulation of disadvantage through life, rather than taking a cross-sectional, snapshot view at one point in time, and provides a way of bringing a range of explanatory factors together conceptually. Far less attention has been paid to the accumulation of advantage, however.
What of health care? The provision of health care for all that is free at the point of use through the National Health Service has done nothing to reduce health inequality, contrary to initial expectations at the time of the inception of the NHS (Bartley, 2004). It has been suggested that health inequalities have persisted because by the time people come to use health services their disease is already established and the effects of living conditions and lifestyle have taken their toll. This is not to say that health care is ineffective, rather that it is not able to redress the socioeconomic distribution of poor health. Moreover, there is evidence that although everyone in the population has access to health care in theory, in practice there are issues of equity in achieving that access, which may in fact further compound existing inequalities.

Inequalities in health and the NHS

The inverse care law was proposed in 1971 by Julian Tudor-Hart. The law states that those most in need of health care are least likely to receive it; that those with the best health status tend to receive the highest quality health care; and that the law is most evident where health care provision is subject to the greatest market forces (Tudor-Hart, 1971). The inequities in the provision of health services have been incompatible with the central tenets of the UK National Health Service since its inception in 1948, but continue to the present day (see Box 9.5; Shaw and Dorling, 2004; Guthrie et al., 2006).
If provision of adequate and appropriate healthcare is one mechanism by which inequalities in health may be explained and addressed, then the inequities described by the inverse care law would need to be reversed.

Figure 9.6 The relationship between three measures of healthcare provision (doctors, dentists and informal/unpaid care) and the proportion of the population with both a limiting long-term illness and poor health in the previous twelve months.

Notes: Data are from the census 2001, and are for counties, unitary authorities and former metropolitan authorities of England and Wales, Scottish council areas and Northern Ireland as a whole. Data on medical professionals are only available for England and Wales, hence the limited extent of those graphs.

Adapted from: Wheeler et al., 2005.
Box 9.5: Using the 2001 census to investigate health care supply and demand

The 2001 census has been used to study the relationship between area-level measures of poor health and the availability of health professionals. For the first time, this census also asked people to state whether they provided care for family or friends, allowing similar study of the relationship between poor health and the provision of informal, unpaid care (Shaw and Dorling, 2004; Wheeler et al., 2005).

The graphs below show the relationship between a measure of poor health and measures of a) medical doctors; b) dental practitioners and c) people providing fifty or more hours of care per week on an informal basis. These demonstrate the inverse care law operating with respect to doctors and dentists; they are more likely to live in the areas with the healthiest populations. While this census data does only tell us about where these health practitioners live, rather than where they practice, the geographical patterns are nationwide rather than local (that is to say they cannot be simply explained by health professionals commuting from ‘healthy’ to ‘unhealthy’ areas to work).

Conversely, the relationship between poor health and the provision of informal care demonstrates an extremely strong positive relationship; care is provided in almost direct proportion to need (making the reasonable assumption that the poor health measure is a good proxy of need). See Figure 9.6

Conclusions: Health inequalities policy

Health inequalities have received a varying amount of policy attention over the last few decades. The Labour government commissioned Black Report of the late 1970s was effectively ignored by the Conservative administration that was in power by the time the report was published (Townsend et al., 1988). The next substantive approach to health inequalities by government came in 1998 with the publication of the Independent Inquiry into Inequalities in Health (‘the Acheson Report’, Acheson, 1998) that had been commissioned by the recently elected Labour government. This comprised an extensive analysis of health inequalities in the UK, along with a series of wide-ranging policy recommendations, from advocating the promotion of breast feeding to a review of the impact of the European Common Agricultural Policy on health inequalities. Some of these recommendations were very specific and have fed directly into public health activities, such as the requirement for Directors of Public Health to produce local health equity profiles and to undertake regular audits to monitor progress towards equity in their local areas. However, others, although laudable, were vague and very difficult to implement and monitor (for example, recommendation 14 was “We recommend the further development of a high quality public transport system which is integrated with other forms of transport and is affordable to the user”).

The Department of Health has a series of ‘Public Service Agreement’ (PSA) targets on health inequalities, which currently are supposed to be met by 2010. For example,
there is a target for life expectancy that aims to reduce by 10% “...the relative gap (i.e. percentage difference) in life expectancy at birth between the fifth of areas with the worst health and deprivation indicators...and England as a whole” (DoH, 2006). It is unclear whether or not these targets will be met, although certainly with respect to life expectancy this seems unlikely (see our previous discussion of life expectancy figures). Moreover, as an inequality target this does not really pass muster, as it does not relate to the entire social spectrum.

Aside from these specific health inequalities policies, more general poverty and related social policies could have a substantial impact on public health and inequality. The evidence presented here connecting poverty and poor health outcomes shows the fundamental and urgent need for policies which tackle poverty and low income. For example, the Government’s target of eliminating child poverty by 2020, if achieved, would potentially impact upon the entire life course of health risks and outcomes for children. Current policy, however, focuses on improving low incomes almost entirely through paid work, an approach which does nothing to improve the incomes of those who cannot work, such as some disabled people. Moreover, the level at which benefits are set may not be adequate to maintain healthy living (as outlined in Box 9.2). It may not be as fashionable (or as cheap) as focusing on building social capital or sending in teams of health trainers to a few selected deprived areas, but social security policy has a vital role to play in tackling poverty and low incomes and thereby addressing inequalities in health.

**Summary**

- Poverty, inequality and poor health have a long and closely entwined relationship in British history.

- Despite marked and continued overall improvements in life expectancy we can still observe health inequalities such that income and wealth have a marked influence on life and death.

- A range of data sources show evidence of social and geographical inequalities in Britain in terms of mortality, morbidity and disability.

- Health inequalities can be explained by a combination of materialist, lifestyle and psychosocial factors operating over the life course. The relative importance of these factors is disputed.

- Inequalities in health are further entrenched when there are inequities in the provision of health care.

- Policies which reduce poverty and inequality are key to tackling health inequalities. Social security policies have a vital role to play in ensuring adequate income levels.

**Questions for discussion –**
• What is the relationship between poverty, wealth and health outcomes?
• Will the government reach its goal of eradicating child poverty by 2020?
• What policies could be instigated to attempt to reverse the inverse care law?

References


Further Reading


Electronic Resources

**Community health profiles** [http://www.communityhealthprofiles.info/](http://www.communityhealthprofiles.info/)


**Health Poverty Index Visualisation Tool** [http://www.hpi.org.uk/](http://www.hpi.org.uk/)

**GLOSSARY**

**Inequality** is said to exist when there is a difference in the distribution of a resource (such as income) or outcome (such as mortality or educational achievement) across groups of people or places (for example, by socio-economic group, by gender, or by age-group). Source: Shaw et al., 2007

**Inequity** and **equity** refer to how fairly services, opportunities and access are distributed across groups of people or places, according to the need of that group. Inequities are said to occur when services do not reflect health needs. Source: Shaw et al., 2007

Taking a **life course perspective** refers to looking at the long-term processes that link outcomes in adult life with exposures that occurred in earlier life – during gestation, childhood, adolescence, in earlier adult life or across generations.

**LLTI** refers to **limiting long-term illness**, this covers any long-term illness, health problem or disability which limits daily activities or work.

**Morbidity** is illness or disease (whereas mortality refers to death).

The term **psychosocial** refers to a range of factors and outcomes that lie at the interface of the social and psychological, such as control at work, autonomy, social support, depression and social capital. Source: Shaw et al., 2007