

## Chapter 12

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# The social determination of ethnic/racial inequalities in health

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### 12.1 Introduction

Differences in health across ethnic groups, in terms of both morbidity and mortality, have been repeatedly documented in the US (Department of Health and Human Services 1985; Rogers 1992; Sorlie *et al.* 1992, 1995; Rogot *et al.* 1993; Krieger *et al.* 1993; Davey Smith *et al.* 1998; Pamuk *et al.* 1998; Williams 2001), the UK (Marmot *et al.* 1984; Rudat 1994; Harding and Maxwell 1997; Nazroo 1997*a,b*, 2001; Erens *et al.* 2001), Latin America (Pan American Health Organization 2001), South Africa (Sidiropoulos *et al.* 1997), Australia (McLennan and Madden 1999), and elsewhere (Polednak 1989). However, the factors underlying such differences remain contested. In particular, the significance of social determinants, particularly the social inequalities that ethnic minority groups face, remains the subject of considerable debate. Some claim that social and economic inequalities make a minimal, or no, contribution to ethnic inequalities in health (Wild and McKeigue 1997); others suggest that even if they do contribute, the cultural and genetic elements of ethnicity must also play a role (Smaje 1996); and others argue that ethnic inequalities in health are predominantly determined by socio-economic inequalities (Navarro 1990; Sheldon and Parker 1992).

In part, the ongoing debate about the significance of social inequalities to ethnic differences in health is a consequence of the empirical complexity of the field, both in terms of the difficulties of undertaking research and the sometimes poor quality data that result, and in terms of the difficulty of interpreting findings. Take, for example, Table 12.1, which shows infant mortality rates for Black and white mothers in the US stratified by mother's educational status. The table shows that infant mortality rates are strongly patterned by education for both Black and white women, with increasing years of education predicting lower levels of infant mortality. However, there is an ethnic/racial difference in mortality rate at each educational level, with the Black/white ratio for infant mortality increasing with level of education. And, the most disadvantaged group of white women (those who have not completed high school) have a lower infant mortality rate than the most advantaged group of Black women (college graduates). How are such data to be interpreted? Which other explanations may be relevant?

**Table 12.1** Infant mortality rates for mothers aged 20 years and over in the US, 1995

<b>Maternal education</b>	<b>White</b>	<b>Black</b>	<b>Black/White ratio</b>
Less than 12 years	9.9	17.3	1.74
12 years	6.5	14.8	2.28
13–15 years	5.1	12.3	2.41
16 years or more	4.2	11.4	2.71

Source: Pamuk *et al.* 1998.

Within the UK, similar data have been used to suggest that socio-economic inequalities do not contribute to ethnic inequalities in health (Marmot *et al.* 1984; Harding and Maxwell 1997). But such interpretations fail to account for the complexity of the social and economic inequalities faced by ethnic minority groups—a complexity that cannot be fully captured by simple measures of socio-economic position, such as class or education (Kaufman *et al.* 1997, 1998; Nazroo 1997a, 1998). It is likely that such findings in fact reflect:

- 1 The non-comparability of markers of socio-economic position across ethnic/racial groups (the social significance of a college education is different for white and Black women);
- 2 The importance of assessing socio-economic inequalities over the life course (a snapshot measure will fail to capture the full nature of the inequality faced by marginalized groups); and
- 3 The importance of assessing other risk factors related to ethnicity/race that may also affect health, such as racism and geographical segregation.

Indeed, in both the US and the UK, data limitations have greatly hampered investigations of ethnic inequalities in health and how they might be structured by social and economic disadvantages, particularly as obvious data limitations are often ignored by investigators. Given the growing sophistication of inequalities in health research generally, it is worrying, but perhaps not surprising, that such empirical difficulties lead to the persistence of crude explanations based on cultural stereotypes and claims of genetic difference (Soni Raleigh and Balarajan 1992; Gupta *et al.* 1995; Stewart *et al.* 1999), despite a lack of concrete evidence, more than 100 years of research exposing the limitations of the assumptions underlying such explanations (e.g. Bhopal 1997), and growing evidence that the obvious social and economic inequalities faced by ethnic minority groups are likely to be a fundamental explanation (Krieger *et al.* 1993; Williams *et al.* 1994; Williams 1999; Davey Smith *et al.* 1998; Krieger 2000; Nazroo 2001; Karlsen and Nazroo 2002a).

In this chapter, we will illustrate the impact of some of these limitations on how data are interpreted, and suggest that social and economic inequalities are fundamental causes of ethnic inequalities in health. We will then relate the socio-economic patterning of

ethnic inequalities in health to the potential explanations for such inequalities explored in other chapters in this volume. We will then conclude by suggesting that an adequate understanding of racism is fundamental to an understanding of ethnic inequalities in health. But we will begin by discussing the ethnic/racial make-up of modern industrial societies and the extent of social disadvantage associated with ethnicity/race, using the US and UK as examples.

## 12.2 Ethnic/racial composition of industrialized nations

The non-white populations of the US and UK have quite different histories and a quite different composition. Although some non-white people settled in the UK prior to World War II (mainly in London and the ports on the west coast—Bristol, Cardiff, Liverpool, Glasgow—and primarily related to the slave trade), most of the non-white migration to Britain occurred after World War II. This was driven by the post-war economic boom and consequent need for labour—a need that could be filled from British Commonwealth countries (primarily countries in the Caribbean and the Indian subcontinent). This ‘economic’ migration was followed by migration of spouses and children and, sometimes, older relatives, in a climate when the legislation regulating entry into the UK became increasingly restrictive. Migration from these countries was not evenly spread over time: immigration from the Caribbean and India occurred throughout the 1950s and 1960s, peaking in the early 1960s; from Pakistan, largely in the 1970s; from Bangladesh, mainly in the late 1970s and early 1980s; and from Hong Kong, in the 1980s and 1990s. In addition, there was a notable flow of immigrants from East Africa in the late 1960s and early 1970s, made up of migrants from India to East Africa who were subsequently expelled. Over the past 10 years, migration to the UK has taken a very different form, including many refugees.

However, alongside this ‘visible’ migration, there has been a long history of migration to England from Ireland, which continued during the active recruitment of labour from the Caribbean and the Indian subcontinent. The history of Irish migration to England, as to the US, holds important lessons on the circumstances of economic migrants and their descendants, and how far skin colour is a demarcating factor.

The collection of data on ethnicity in the UK Census has happened only twice, for 1991 and 2001. Data from the 2001 Census of England, which included a fairly comprehensive assessment of ethnicity, are shown in Table 12.2, along with an estimate of the percentage in each group who were born in England. Table 12.2 shows that at the 2001 Census, nine per cent of the English population identified themselves as belonging to one of the non-white ethnic minority groups, with a further four per cent identifying themselves as a member of a white ethnic minority group. It also shows that less than half of the non-white ethnic minority population was born in England, though this varies across specific groups, reflecting both period of migration and patterns of fertility.

In contrast to the UK, racial categories have been used in the US Census since the first census in 1790, illustrating the centrality of race to US society (Nobles 2000;

**Table 12.2** Ethnic composition of the English population

	Number	Per cent	Per cent migrant*
White British	42,747,000	87	2
White Irish	624,000	1.3	49
Other White	1,308,000	2.7	69
Black Caribbean (incl. mixed)	793,000	1.6	47
Black African (incl. mixed)	552,000	1.1	83
Other Black	95,000	0.2	60
Indian Asian	1,029,000	2.1	75
Pakistani Asian	707,000	1.4	67
Bangladeshi Asian	275,000	0.6	87
Other Asian	238,000	0.5	88
Mixed White and Asian	184,000	0.4	47
Chinese	221,000	0.5	81
Other (incl. other mixed)	336,000	0.7	88

Source: 2001 Census.

\* Estimated from Health Survey for England 1999 (see Erens *et al.* 2001)

Williams 1997). In compliance with Article One of the US Constitution, three racial categories were utilized in the 1790 census that reflected a hierarchy of racial preference which was driven by a racist ideology: whites, Blacks (as three fifths of a person), and 'civilized Indians' (that is those who paid taxes).

Every US Census has subsequently categorized the population by race, although the racial categories utilized have changed at almost every Census (as the ethnic categories did between the 1991 and 2001 UK Censuses). In some censuses, racial categories were used to capture various degrees of racial admixture between white and Black; for example, the 1890 census included the categories of mulatto, quadroon, and octoroon. The Thirteenth Amendment to the US Constitution abandoned the Three-Fifths Rule, but Indians continued to be divided into the categories of 'civilized Indians' and 'Indians not taxed' until all American Indians were granted US citizenship by Congress in 1924 (Anderson and Fienberg 1995).

Over time, new racial categories were added as the need arose to keep track of new immigrant groups. So, for example, Japanese was added as a new category in the 1890 Census; and Filipino, Hindu, and Korean in the 1920 Census; and Mexican in the 1930 Census. Thus, changes in racial classification have historically captured the emergence or redefinition of marginal population groups.

The American ideology of a clear racial hierarchy that reflected the 'one drop rule' (one drop of non-white blood made one non-white) was also evident in how race was assigned to all newborns for the tabulation of natality statistics prior to 1989 (National Center for Health Statistics 2003). A child would only be assigned the white race if both

parents were white. If an infant's parents were of different races and one parent was white, the child would always be assigned the other parent's race. However, if either parent was Hawaiian, the child would be classified as Hawaiian. In all other cases, the child would be assigned the father's race.

Guidelines established in 1978 by the federal government's Office of Management and Budget (OMB) for the uniform assessment of race and ethnicity (Office of Management and Budget 1978), continue to shape how race is assessed in the US. These guidelines recognized four racial groups—white, Black, American Indian or Alaskan Native, and Asian or Pacific Islander (API)—and one ethnic category (Hispanic). Prior to the 2000 Census, there was considerable debate regarding how race ethnicity should be conceptualized and measured (Evinger 1995). After mulling over the suggestions, the OMB issued new guidelines in 1997 that made only a few changes. The biggest change was that persons of mixed racial ancestry were allowed to list themselves in as many racial categories as apply. Other changes included the expansion of the racial categories by one, with Native Hawaiian and Other Pacific Islander constituting a new racial category separate from Asian. Changes in terminology allow for 'Black or African American' and 'Hispanic or Latino' to be utilized. These new guidelines were used in the 2000 Census and all Federal statistical agencies were required to use them by 2003. The OMB argues that they are only minimal standards, but few agencies go beyond them and they have shaped how other organizations and researchers assess race.

In the 2000 Census, the US population was 75.1% white, 12.3% Black, 0.9% American Indian or Alaskan Native, 3.6% Asian, 0.1% Native Hawaiian and Other Pacific Islander, 12.5% Hispanic, and 2.4% belonging to two or more races (Grieco and Cassidy 2001). There is considerable heterogeneity within each of the major racial/ethnic groups. For example, the American Indian and Alaskan Native category consists of over 450 federally recognized tribes and Alaskan Native villages (Norton and Manson 1996). American Indian tribes share a common history of exploitation and oppression, but there is great diversity in tribal cultures, socio-economic circumstances, and health. In a similar vein, the Hispanic category consists of more than 25 national origin groups that share a common language, religion, and traditions, but vary in terms of the timing of their migration to the US, regional concentration, incorporation experiences, and socio-economic status and health (Sorlie *et al.* 1993; Vega and Amaro 1994).

The Asian population in the US consists of persons from some 28 Asian countries, each of which has its own distinctive history, culture, and language (Lin-Fu 1993). Although the Asians have the highest median level of income in the US, some Asian subgroups (such as the Hmong, Laotian, and Cambodian) have a lower median income and higher poverty rates than Blacks or American Indians (US Census 1993). The Pacific Islander population consists of persons from some 25 Pacific Island cultures (Lin-Fu 1993). There is also considerable cultural and ethnic diversity in both the Black and the white population. Regional variations in morbidity and mortality

have been noted among Blacks (Fang *et al.* 1997), and migration status also predicts variations in health within the Black population of the US (David and Collins 1997; Fruchter *et al.* 1985).

The US Census also collects data on many white ethnic subgroups but the extent to which ethnicity predicts variations in health for the white population has not received much attention in recent health research in the US.

### 12.3 Ethnic/racial disadvantage—variation and similarities across groups and countries

There is considerable demographic and socio-economic diversity among the major racial/ethnic groups in the US. Some of this is summarized in Table 12.3, which shows that:

- ◆ Asians and Hispanics have much higher proportions of immigrants than the other groups;
- ◆ The age structure of these groups varies with American Indians, Native Hawaiians, and Hispanics having a lower median age than whites, Asians, and Blacks;
- ◆ Whites and Asians have the lowest levels of female-headed households and Blacks have the highest;
- ◆ Whites and Asians have higher levels of educational attainment, percentage of persons in managerial and professional occupations, and lower rates of poverty than the other population groups;
- ◆ Whites have higher levels of home ownership than all other racial/ethnic groups.

Much of this is complicated by the geographical segregation of ethnic and racial minority groups, something which is a prominent theme in the US (Williams and Collins 2001). Indeed, racial residential segregation is the foundation on which Black–white disparities in socio-economic position have been built in the US (Massey

**Table 12.3** Demographic and socio-economic characteristics by race and ethnicity, US, 2000

Indicator	White	Black	Am. Indian / Alaska Native	Asian	Native Hawaiian / Pacific Islander	Other race	Hispanic
% Hispanic	8.0	2.0	16.4	1.2	11.4	97.0	n/a
% foreign born	3.5	6.1	5.4	68.9	19.9	43.4	40.2
Median age	37.7	30.2	28.0	32.7	27.5	24.6	25.8
% female headed	9.2	30.8	20.9	9.1	16.1	19.3	17.8
% white collar	36.6	25.2	24.3	44.6	23.3	14.2	18.1
% high school +	85.5	72.3	70.9	80.4	78.3	46.8	52.4
% college grad.+	27.0	14.3	11.5	44.1	13.8	7.3	10.4
% poor	8.1	24.9	25.7	12.6	17.7	24.4	22.6
% own home	71.3	46.3	55.5	53.4	45.0	40.5	48.0

Source: US Census 2000.

and Denton 1993). Segregation refers to the physical separation of the races that limited the housing options of Blacks to the least desirable residential areas. In the late 19th and early 20th century, segregation emerged most aggressively in the developing industrial urban centres to ensure that whites were protected from residential proximity to Blacks. It was imposed by legislation, supported by major economic institutions, enshrined in the housing policies of the federal government, enforced by the judicial system, and legitimized by an ideology of White supremacy that was advocated by the church and other cultural institutions (Cell 1982; Jaynes and Williams 1989).

Although the Civil Rights Act of 1968 made discrimination in the sale or rental of housing units illegal in the US, studies reveal that explicit discrimination in housing persists (Clark 1992; Fix and Struyk 1993). Moreover, in more subtle ways, Blacks are discouraged from residing in white residential areas, and whites continue to move out of communities when the Black population increases (Shihadeh and Flynn 1996; Turner 1993). Thus, although African Americans express the highest support for residence in integrated neighbourhoods (Bobo and Zubrinsky 1996), their residential exclusion remains high and distinctive; an analysis of the 2000 Census data showed the national index of dissimilarity for the US was 0.66 (Glaeser and Vigdor 2001), meaning that 66 per cent of Black residents would have to move to achieve equal representation of their group in residential areas. Generally, a dissimilarity index value above 0.60 is thought to represent extremely high segregation (Massey and Denton 1989). So, although most immigrant groups have experienced some residential segregation in the US, no immigrant group has ever lived under the high levels of segregation that currently characterize the African American population (Massey and Denton 1993).

Such residential segregation has truncated socio-economic mobility for African Americans by determining access to education and employment opportunities, and been a central mechanism through which racial inequality has been created and reinforced (Jaynes and Williams 1989; Massey and Denton 1993). In the US, residence determines which public school students can attend, so residential segregation has led to highly segregated elementary and high schools. The funding of public education is under the control of local government, so community resources determine the quality of the neighbourhood school, and the concentration of poverty and consequent low community resources in Black neighbourhoods is a fundamental cause of racial differences in the quality of education (Orfield 1996). Although there are millions of poor whites in the US, poor white families tend to be dispersed throughout the community with many residing in desirable residential areas (Wilson 1987). Accordingly, most poor white students go to schools where the majority of students come from middle-class backgrounds (Orfield 1996). In contrast, public schools with a high proportion of Blacks and Hispanics are dominated by poor children.

Research also reveals that institutional discrimination, based on residential segregation, severely restricts access to jobs for Blacks. In the last several decades there has been

a mass movement of low-skilled, high-paid jobs from many of the urban areas where Blacks are concentrated to the suburbs (Wilson 1987, 1996). Some corporations explicitly use the racial composition of areas in their decision-making process regarding the placement of new plants and the relocation of existing ones (Cole and Deskins 1988). Negative racial stereotypes of African Americans and of the areas where they are concentrated play an important role in these decisions (Kirschenman and Neckerman 1991; Neckerman and Kirschenman 1991).

An empirical analysis of the effects of segregation on young African Americans making the transition from school to work documented that segregation is a key determinant of racial differences in socio-economic mobility (Cutler *et al.* 1997). This study found that getting rid of residential segregation would lead to the elimination of Black–white differences in earnings, high-school graduation rates, and unemployment, and would reduce racial differences in single motherhood by two thirds. Segregation also creates health-damaging conditions in the social and physical environment. High levels of segregation create distinctive ecological environments on multiple dimensions for African Americans. Sampson and Wilson (1995) reported that in the 171 largest cities in the US, there was not even one where whites lived in comparable ecological conditions to Blacks in terms of poverty rates or rates of single parent households. These researchers came to the striking conclusion that ‘the worst urban context in which whites reside is considerably better than the average context of Black communities’ (Sampson and Wilson 1995).

Although analyses of residential segregation are less developed in the UK, they also show marked differences between the geographical locations of ethnic minority and white people. Analysis of the 1991 Census (Owen 1992, 1994) has shown that the non-white ethnic minority population is largely concentrated in England, mainly in the most populous areas. Key findings are:

- ◆ More than half of the ethnic minority population lives in South East England, where less than a third of the white population lives.
- ◆ Greater London contains 44.8 per cent of the ethnic minority population and only 10.3 per cent of the white population.
- ◆ Elsewhere, the West Midlands, West Yorkshire, and Greater Manchester display the highest relative concentrations of people from ethnic minorities.
- ◆ Almost 70 per cent of ethnic minority people live in Greater London, the West Midlands, West Yorkshire, and Greater Manchester, compared with just over 25 per cent of whites.
- ◆ There are even greater differences when smaller areas (enumeration districts) are considered: more than half of ethnic minority people live in areas where the total ethnic minority population exceeds 44 per cent, compared with the 5.5 per cent national average.



Analysis of the areas where ethnic minority people live in England show that they are much more likely to live in deprived areas (Karlsen *et al.* 2002). For example, 81 per cent of Pakistani and Bangladeshi people, 72 per cent of Caribbean people, and 49 per cent of Indian people lived in the bottom quintile of areas, using a standard area deprivation score.

As for the US, there are also marked economic inequalities by ethnic group in the UK. Some indicators of this are summarized in Table 12.4. The first part of the table shows rates of paid employment for men aged 16 to 65. For the white English group, three-quarters of men are in paid employment. Figures are lower for all of the ethnic minority groups (except for the Chinese group), with particularly low rates in the Caribbean and Pakistani groups, and even lower rates for the Bangladeshi group (with less than half in paid employment). The second part of the table shows occupational class of the head of household. The data suggest that the profiles of white English and Indian households are similar, with white minority and possibly Chinese households better off, and Caribbean, Pakistani, and particularly Bangladeshi households worse off. Four out of five Bangladeshi households are headed by someone in a manual occupation. The third and final part of Table 12.4 shows equalized household income from all sources, split into tertiles on the basis of the general population distribution. The data suggest that on this measure, the two white groups are equivalent, with the Indian and the Caribbean group worse off, and the Pakistani and the Bangladeshi group particularly poorly off—two-thirds of the Pakistani group and almost 90 per cent of the Bangladeshi group are in the bottom tertile. In terms of the top income tertile, the Chinese group is equivalent to the two white groups, but it has substantially more households in the bottom tertile, suggesting greater inequality within the Chinese group.

**Table 12.4** Ethnic differences in socio-economic indicators in England

	Caribbean (%)	Indian (%)	Pakistani (%)	Bangladeshi (%)	Chinese (%)	White minority (%)	White English (%)
Male employment rates, aged 16–65	58	69	59	46	67	72	75
Registrar General's class							
I/II	24	34	23	12	40	46	35
III/IV	19	12	10	7	16	13	14
V	28	29	40	39	34	25	32
VI	29	26	27	42	11	16	19
Equalized household income							
Bottom tertile	47.8	45.1	68.8	89.6	41.3	26.8	30.9
Middle tertile	28.0	31.0	19.7	5.1	22.3	30.5	35.5
Top tertile	24.1	23.9	11.5	5.3	36.4	42.7	33.6

Source: Health Survey for England 1999 (see Erens *et al.* 2001).

## 12.4 Heterogeneity of the ethnic patterning of health

Table 12.5, containing data on mortality rates for 1999, illustrates the patterning of mortality by racial/ethnic group and age in the US (Hoyert *et al.* 2001; Mathews *et al.* 2002). The pattern is one that is familiar (Sorlie *et al.* 1995). Rates for non-Hispanic Black people are more than twice as high as those for non-Hispanic white people until early old age, when their relative rates begin to drop. A similar pattern is found for Native Americans, though differences are smaller at younger ages, and the 'cross-over' with non-Hispanic white people at older ages is clearer. Rates for Hispanic people are generally lower than those of non-Hispanic whites, though the differences are small at younger ages. Rates for Asian/Pacific Islanders are uniformly lower than those for non-Hispanic whites.

The pattern reveals heterogeneity in experience across racial/ethnic groups, with some doing well in comparison with non-Hispanic whites, others doing badly, and differences varying across the life course. Notable, perhaps, is the position of Hispanic people, given their relatively poor socio-economic position.

It has been suggested that these findings reflect one or more of a 'protective' Hispanic culture (Frisbie *et al.* 2001); health selection (Jasso *et al.* 2002); or poor data quality, with under-coverage of denominators and inaccuracies in the reporting of numerators (Rosenberg *et al.* 1999). Indeed, there are important limitations linked to the quality of these mortality data for all groups (Hahn 1992). The numerator for the officially

**Table 12.5** Race/ethnic inequalities in mortality in the US, 1999

	<b>Non-Hispanic White</b>	<b>Non-Hispanic Black</b>	<b>Hispanic origin</b>	<b>Asian or Pacific Islander</b>	<b>Native American</b>
Infant mortality					
Infant mortality rate (per 1000 live births)	5.8	14.1	5.7	4.8	9.3
Rate ratio vs. non-Hispanic Whites	–	2.43	0.98	0.83	1.60
Younger adult mortality					
Rate (per 100,000) for ages 20–24	78.8	163.0	97.9	48.1	151.8
Rate ratio vs. non-Hispanic Whites	–	2.07	1.24	0.61	1.93
Rate (per 100,000) for ages 40–44	208.0	466.2	192.8	101.7	331.9
Rate ratio vs. non-Hispanic Whites	–	2.24	0.93	0.49	1.60
Rate (per 100,000) for ages 60–64	1225.8	2060.8	913.8	706.2	1379.3
Rate ratio vs. non-Hispanic Whites	–	1.68	0.75	0.58	1.13
Older adult mortality					
Rate (per 100,000) for ages 70–74	2997.8	4227.5	2115.3	1812.5	2785.7
Rate ratio vs. non-Hispanic Whites	–	1.41	0.71	0.60	0.93
Rate (per 100,000) for ages 80–84	7546.4	8702.5	4838.3	4979.3	4770.9
Rate ratio vs. non-Hispanic Whites	–	1.15	0.64	0.66	0.63

Sources: Hoyert *et al.* 2001; Mathews *et al.* 2002.

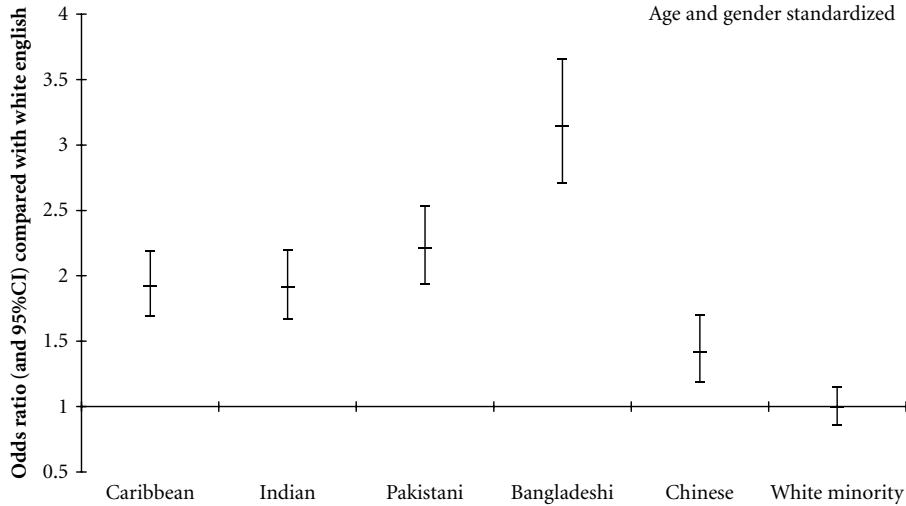
reported death rates in the US comes from death certificates. Funeral home directors and other officials who record racial status on the death certificate misclassify as many as 26 per cent of self-identified American Indians and 18 per cent of Asians and Pacific Islanders as belonging to a different race, with most of them being misclassified as white (Sorlie *et al.* 1992). There appears to be little misclassification of Blacks and whites, but 10 per cent of Hispanics are also misclassified as non-Hispanic. This undercount in the numerator suppresses the death rates for these groups and slightly inflates the death rates for whites.

Problems with the denominator can also affect the quality of mortality statistics (Notes and Comments 1994). Census data are used to calculate the denominators for mortality rates. Using a denominator that has an undercount inflates the obtained rate in exact proportion to the undercount in the denominator. Although the overall undercount for the US population is relatively small, it is much higher for Blacks than whites, with evaluation based on demographic analysis suggesting that there is a net census undercount of 11–13 per cent for all of the 10-year age groups for Black males between the ages of 25–64 (National Center for Health Statistics 1994). Thus, all of the officially reported morbidity and mortality rates for African American males in these age groups are 11–13 per cent too high. Some evidence suggests that the undercount rate for Hispanics and Indians residing on reservations may be even higher than the undercount for the Black population (Hogan 1993).

However, generally, the heterogeneity in mortality rates parallels heterogeneity in migration, settlement, and socio-economic experiences. This does, of course, point to the need to reflect the diversity of groups in data collection efforts, but also to be aware of, and sensitive to, potential ethnic differences within groups (as described above, we cannot assume that all Pacific Islanders or all Hispanics are equivalent). For example, differences among Hispanic subgroups include median age, immigration history, geographic distribution, fertility and family patterns, health status and mortality rates, income, education levels, and occupational distribution (Sandefur *et al.* 2001).

In the UK, mortality data are not available by ethnic group. Country of birth is recorded on death certificates, but this carries three significant problems. First, and most obvious, it ignores the situation of ethnic minority people born in the UK, whose experiences might be quite different. Second, given forced migration patterns and the artificial construction of national borders after the 'fall' of the British Empire, country of birth groupings do not necessarily reflect ethnic groups (e.g. the heterogeneity of those born in South Asia or India, the large South Asian population who migrated to Britain from the Caribbean). Third, British colonial history means that a significant number of white people were born in ex-colonies and migrated back to Britain after the World War II. And, as for the US, the denominator is calculated from Census data, with evidence of significant under-counting of some ethnic groups.

Although the UK does not have mortality data by ethnicity, there has been a growth in data on ethnic differences in morbidity over the last decade. Figure 12.1, drawn from



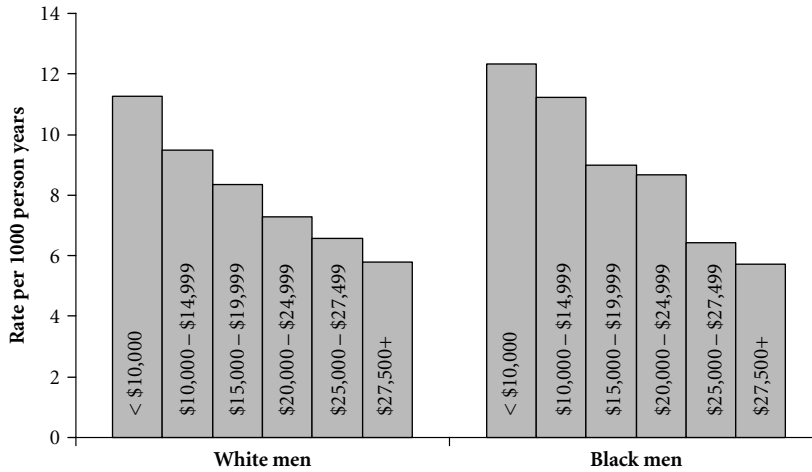
**Fig. 12.1** Ethnic differences in reported fair or bad general health in England.

Source: Health Survey for England 1999; see Erens *et al.* 2001.

the 1999 Health Survey for England (Erens *et al.* 2001), shows differences in self-reported health across ethnic groups. It charts the odds ratio and 95% confidence intervals, in comparison with a white English group, for reporting health as fair or bad. Immediately obvious is the heterogeneity in experience across ethnic groups. Most notable is the wide variation for the three South Asian groups—Indian, Pakistani, and Bangladeshi—who are typically treated as one and the same ethnic group in British data (e.g. McKeigue *et al.* 1988; Gupta *et al.* 1995). Again, the diversity in health experience across ethnic minority groups in the UK is paralleled by differences in migration history, patterns of settlement in the UK, and economic experiences, as illustrated earlier.

## 12.5 Socio-economic patterning of health within and across ethnic groups

It is now reasonably clear that a socio-economic patterning of health is present within ethnic groups in industrialized countries. Figure 12.2 shows all-cause mortality rates over the 16-year follow-up period in the US MRFIT study, stratified by mean income in the area of residence of respondents (individual socio-economic data were not included in the study) (Davey Smith *et al.* 1998). The figure shows a very clear gradient for white and Black men, which is similar for both groups. The extent of the socio-economic inequality in health is shown by the twofold difference in mortality rates between those in the top and bottom income groups for both Black and white men. Table 12.6 shows a marker for morbidity, self-reported fair or poor health, and level of income for Black, Hispanic, and white men and women. Again, there is a clear gradient that is similar for all groups.



**Fig. 12.2** Death rate in the US by median family income in the area of residence.

Source: MRFIT data.

**Table 12.6** Percentage of men and women reporting fair or poor health, by race and income, US, 1995

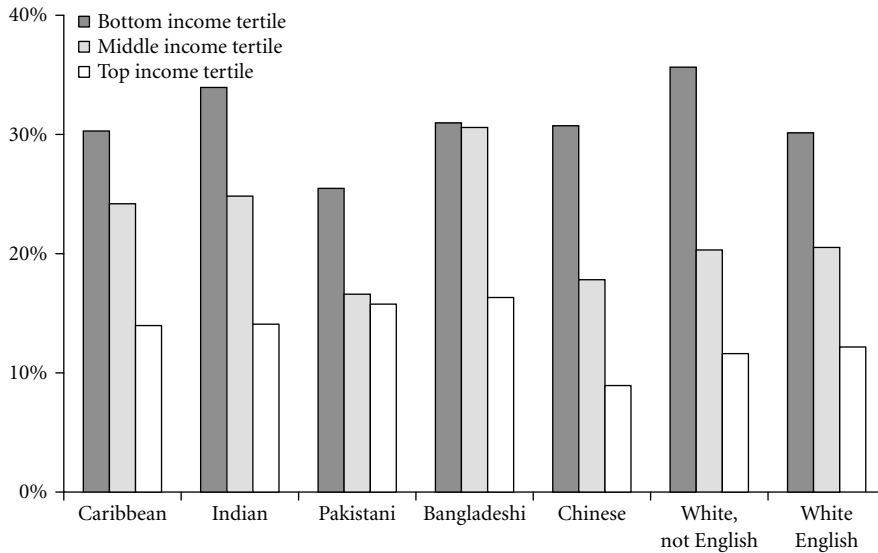
Household income	Men			Women		
	White	Black	Hispanic	White	Black	Hispanic
Poor	30.5	37.4	26.9	30.2	38.2	30.4
Near poor	21.3	22.6	19.2	17.9	26.1	24.3
Middle income	9.3	13.1	11.9	9.2	14.6	13.5
High income	4.2	5.0	4.8	5.8	9.2	7.0

Poor = below federal poverty level; near poor = less than twice the poverty level; middle income = more than twice poverty level but less than \$50,000; high income = \$50,000 or more

Source: Pamuk *et al.* 1998.

Figure 12.3 contains data from the Health Survey for England, showing rates of reporting fair or bad health by ethnicity with each of the ethnic groups stratified by income (equivalized tertiles) (Nazroo 2003). As for the US data, Fig. 12.3 shows a clear relationship between reported general health and economic position for each ethnic group. Important here is that both the US and the UK data again point to heterogeneity within broad ethnic groupings. It is misleading to consider, for example, Black Americans to be uniformly disadvantaged in terms of their health; those in better socio-economic positions have better health. There is nothing inevitable, or inherent, in the link between being Black American, Bangladeshi, etc. and a greater risk of mortality and morbidity.

However, the figures also raise the possibility that socio-economic effects do not explain ethnic inequalities in health. For example, Fig. 12.3 shows that for the top and



**Fig. 12.3** Reported fair or bad health by ethnic group and income tertile in England.

middle-income groups, those in the Bangladeshi group were more likely than those in the white English group to report fair or bad health, and the same is true for differences between Black and white men for many of the income bands in Fig. 12.2 and is particularly obvious for Black and white women and the top and middle-income groups of Hispanic women in Table 12.6. Although this might suggest that socio-economic factors do not contribute to ethnic inequalities in health, it is important to recognize that the process of standardizing for socio-economic position when making comparisons across groups, particularly ethnic groups, is not as straightforward as it might at first seem.

As Kaufman *et al.* (1997, 1998) point out, the process of standardization is effectively an attempt to deal with the non-random nature of samples used in cross-sectional population studies—controlling for all relevant ‘extraneous’ explanatory factors introduces the *appearance* of randomization. But, attempting to introduce randomization into cross-sectional studies by adding ‘controls’ has a number of problems, summarised by Kaufman *et al.* in the following way:

When considering socioeconomic exposures and making comparisons between racial/ethnic groups . . . the material, behavioral, and psychological circumstances of diverse socioeconomic and racial/ethnic groups are distinct on so many dimensions that no realistic adjustment can plausibly simulate randomization. (Kaufman *et al.* 1998, p. 147)

Evidence from the British Fourth National Survey of Ethnic Minorities illustrates this point clearly. The first part of Table 12.7 shows the mean equivalized household income for individuals within particular classes by ethnic group. Each ethnic group

**Table 12.7** Ethnic variations in income within occupational classes in the UK

<b>Mean income by Registrar General's class pounds<sup>1</sup></b>	<b>White</b>	<b>Indian or African Asian</b>	<b>Pakistani or Bangladeshi</b>	<b>Caribbean</b>
I/II	250	210	125	210
III/IV	185	135	95	145
III/M	160	120	70	145
IV/V	130	110	65	120

<sup>1</sup> Based on bands of equivalized household income. The mean point of each band is used to make this calculation, which is rounded to the nearest 5.

shows the expected income gradient by occupational class. However, when comparisons are drawn across ethnic groups, the table shows that, within each occupational class, Caribbean and Indian or African Asian people appear to have similar locations, while white people were better off than them, and Pakistani or Bangladeshi people worse off than them. Indeed, comparing the white and Pakistani or Bangladeshi groups shows that, within each occupational class band, those in the Pakistani or Bangladeshi group had on average half the white income, and class I or II Pakistani or Bangladeshi people had an equivalent average income to class IV or V white people. This suggests that using a measure such as Registrar General's class to adjust for socio-economic status is far from adequate for comparisons across ethnic groups, even if this indicator does reflect socio-economic differences within ethnic groups.

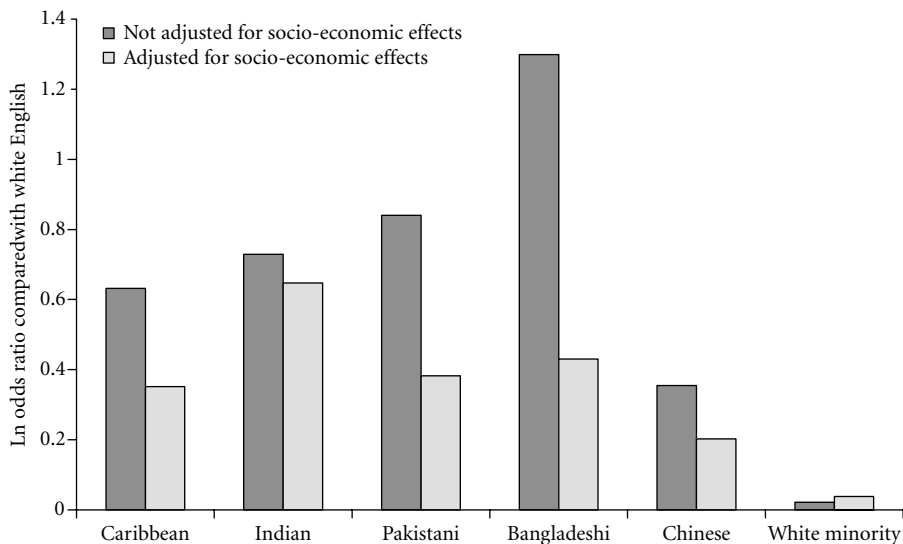
Similar findings have been reported in the US (Lillie-Blanton and Laveist 1994; Williams *et al.* 1994). For example, there are racial differences in the quality of education, income returns for a given level of education or occupational status, wealth or assets associated with a given level of income, the purchasing power of income, the stability of employment, and the health risks associated with occupational status (Williams and Collins 1995). Similarly, Oliver and Shapiro (1995) report that, within occupational groups, white people have higher incomes than Black people; among those below the poverty line, Black people are more likely to remain in this situation than white people; and, within income strata, Black people have considerably lower wealth levels than white people and are less likely to be home owners. The parallels with Table 12.1, which showed data on infant mortality by mother's education status in the US, are striking.

The overall conclusion, then, is that using single or crude indicators of socio-economic position is of little use for 'controlling out' the impact of socio-economic position when attempting to reveal the extent of a 'non-socio-economic' ethnic/race effect. Within any given level of a particular socio-economic indicator, the social circumstances of ethnic minority people in the UK and the US are less favourable than those of white people. This leads to two related problems with approaches that attempt to adjust for socio-economic effects when making comparisons across ethnic groups. The first is that if socio-economic position is simply regarded as a confounding factor

that needs to be controlled out to reveal the 'true' relationship between ethnicity and health, data will be presented and interpreted once controls have been applied. This will result in the impact of socio-economic factors becoming obscured and their explanatory role in determining the health of ethnic minority people will be lost. The second is that the presentation of 'standardized' data allows the problems with such data, outlined by Kaufman *et al.* (1997, 1998) and Nazroo (1997*a*, 1998) and illustrated by Table 12.7, to be ignored, leaving both the author and reader to assume that all that is left is an 'ethnic/race' effect, be that cultural or genetic.

Nevertheless, if these cautions are considered, there are some benefits in attempting to control for socio-economic effects. In particular, if controlling for socio-economic effects alters the pattern of ethnic inequalities in health, despite the limitations of the indicators used, we can conclude that at least some of the differences we have uncovered are a result of a socio-economic effect.

These conclusions are supported by Fig. 12.4, which uses data from the 1999 Health Survey for England to show changes in the odds of reporting fair or bad health for ethnic minority groups compared with white English people, before and after the data had been standardized for a variety of socio-economic factors. Comparing the adjusted and unadjusted figures shows a clear and large reduction in odds ratios for most ethnic groups (to give an accurate visual impression of the size of the change in odds, the natural logarithm of the odds ratio compared with white English people is used). Exceptions are the white minority (predominantly Irish) and Indian groups. This



**Fig. 12.4** Reduction in (Ln) odds ratio of reporting fair or bad health compared with white English after adjusting for socio-economic effects.

Source: Health Survey for England 1999; see Erens *et al.* 2001.



impression is strengthened if the process is repeated across outcomes and has been shown using data from the British Fourth National Survey (Nazroo 2001, 2003).

Returning to US data, Davey Smith *et al.* (1998) show that standardizing for mean household income in area of residence reduces the relative risk for Black compared with white men for all-cause mortality from 1.47 to 1.19. Conversely, adjusting the Black–white mortality differential for a number of medical risk factors (diastolic blood pressure, serum cholesterol, cigarette smoking, existing diabetes, and prior hospitalization for coronary heart disease) only decreased the relative risk from 1.47 to 1.40 (Davey Smith *et al.* 1998). This demonstrates that socio-economic position—as indexed by income of area of residence—is a considerably more important determinant of Black–white differentials in mortality than biological markers of risk and behavioural factors, such as cigarette smoking or diet (to the extent to which the diet influences serum cholesterol and blood pressure).

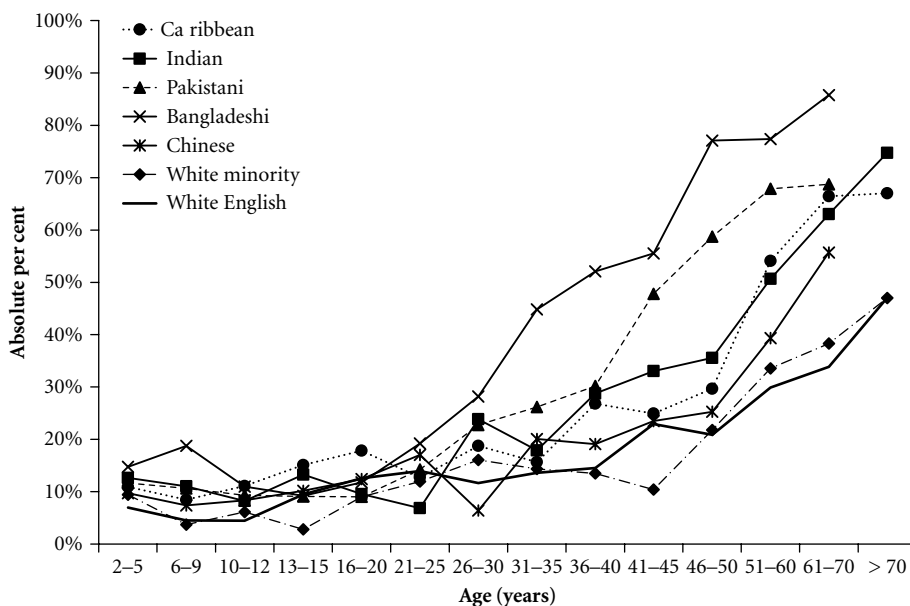
So, these data suggest that differences in socio-economic position make a key contribution to ethnic inequalities in health, particularly if we take seriously Kaufman *et al.*'s (1997, 1998) and Nazroo's (1997a, 1998) cautions on the difficulties with making effective adjustments for socio-economic position. It is also worth emphasizing that the analyses shown here simply reflect current socio-economic position: data on the life course and on other forms of social disadvantage were not included and are almost universally not available in existing studies of ethnic inequalities in health. We turn to these issues next.

## 12.6 Age and the life course

There is growing evidence that socio-economic conditions across the life course can influence current health (Kuh and Ben-Shlomo 1997; see also Chapters 00, 00, 00 in this volume). This could occur in two ways. First, an early 'exposure', perhaps prenatal (Barker 1991) or in early childhood, might set an adverse biological process in train. For example, low birth weight, which is strongly influenced by adverse material circumstances acting over the lifetime of the mother, is associated with high rates of diabetes, coronary heart disease, respiratory disease, and hypertension in adult life. Similarly, short stature, influenced by nutrition in early life, is related to an increased risk of respiratory and cardiovascular mortality (Kuh and Ben-Shlomo 1997). Second, the impact of socio-economic disadvantage on health might accumulate across the life course—a process that has been referred to as 'weathering' with respect to the health of Black women in the US (Geronimus 1992).

Figure 12.5 uses data from the 1999 Health Survey for England to explore how, in England, the ethnic patterning of reported fair or bad health varies by age group. It suggests relatively small absolute differences at a younger age, with large differences beginning to emerge in the mid 20s and becoming very prominent by the mid 30s. In relative terms, though, the ethnic inequalities in health are prominent at a young age,

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**Fig. 12.5** Fair or bad health by ethnic group and age.

Source: Health Survey for England 1999; see Erens *et al.* 2001.

as well as from late 20s onwards, but are more or less absent in teenage years and the early 20s. As described earlier (see Table 12.5), variations in ethnic inequalities in health across the life course are also apparent in US data, but these seem to show a narrowing of differences at older ages and much discussion of possible 'cross-over' effects for Black-white differences (Kestenbaum 1992; Nam 1995), which may be an artefact resulting from poor data quality.

The interpretation of such patterns is not straightforward, but does point to the need for sophisticated approaches to the explanation of the complex patterning of ethnic inequality. In particular, we need to place ethnic inequalities in health within a wide social context. For example, the pattern shown in Fig. 12.5 could reflect a number of co-existing explanations:

- ◆ The growth in absolute differences in risk of fair or bad health with increasing age could reflect the accumulation of risk across the life course (weathering).
- ◆ The presence of large relative differences in risk of fair or bad health in early and middle to late life could reflect the impact of early life and prenatal differences in risk.
- ◆ In the British context, the growth of absolute differences in risk over age could reflect differences between first and second generation migrants, as older people are migrants and younger people, second generation. Cross-sectional differences across age groups reported in US data could also reflect cohort effects.

The final point above reminds us of the need to be aware of a number of potential effects related to migration. First, selection into a migrant group will be related to both health and economic capital. Second, the childhood experiences of migrants will be very different from those of the second generation. So, insofar as these lead to long-term adverse health outcomes or to an accumulation of social and health disadvantage, differences in health across generations might be expected. Third, the experience of migration itself will occur alongside social and economic upheavals, which might have a direct impact on health. Fourth, return migration might have a significant impact on the pattern found in the data, with selection into a return migrant group also being related to both health and economic capital. And fifth, the contemporary social and economic experiences of a migrant and non-migrant generation might be quite different, with the non-migrant generation more likely to do well economically (Nazroo 2004) and to have less traditional ethnic identities (Nazroo and Karlsen 2003). On the other hand, experiences of racism appear to be fairly universal across generations and there is growing evidence that these contribute to ethnic inequalities in health.

### **12.7 Impact of experiences of racial harassment and discrimination on health—the significance of social status?**

Experiences of and awareness of racism appears to be central to the lives of ethnic minority people. Eighty per cent of Black respondents in a US study reported experiencing racial discrimination at some time in their lives (Krieger and Sidney 1996). Qualitative investigations of experiences of racial harassment and discrimination in Britain have found that, for many people, experiences of interpersonal racism are a part of everyday life, that the way they lead their lives is constrained by fear of racial harassment, and that being made to feel different is routine and expected (Virdee 1995; Chahal and Julienne 1999).

Experiences of racial harassment and discrimination were investigated quantitatively, in some depth, in the British Fourth National Survey (Virdee 1997). This suggested that more than one in eight ethnic minority people had experienced some form of racial harassment in the past year. Although most of these incidents involved racial insults, many of the respondents reported repeated victimization and as many as a quarter of all of the ethnic minority respondents reported being fearful of racial harassment. This National Survey also showed that, among ethnic minority respondents, there was a widespread belief that employers discriminated against ethnic minority applicants for jobs and widespread experience of such discrimination (Modood 1997). Indeed, when white respondents to the survey were asked about their own racial prejudice, 26 per cent admitted to being prejudiced against South Asian people, 20 per cent to being prejudiced against Caribbean people, and 8 per cent to being prejudiced against Chinese people.

In the few studies that have been conducted, experiences of racial harassment and discrimination appear to be related to health. Laboratory studies reveal that experiences

**Table 12.8** Racial harassment, racial discrimination, and risk of fair or poor health (British Fourth National Survey)

	<b>All ethnic minority groups</b>	
	<b>Odds ratio*</b>	<b>95% confidence intervals</b>
Experience of racial harassment		
No attack	1.00	–
Verbal abuse	1.54	1.07–2.21
Physical attack	2.07	1.14–3.76
Perception of discrimination		
Fewer than half of employers discriminate	1.00	–
Most employers discriminate	1.39	1.10–1.76
Occupational class		
Non-manual	1.00	–
Manual	1.44	1.07–1.94
No full-time worker in the household	2.42	1.82–3.22

\*Adjusted for gender and age

of discrimination are stressful and produce acute physiological effects (Harrell *et al.* 2003; Clark *et al.* 1999). Population-based studies from the US and elsewhere have shown a relationship between self-reported experiences of racial harassment and a range of health outcomes including hypertension, psychological distress, psychiatric disorders, poorer self-rated health, and days spent unwell in bed (Krieger 2000; Williams and Neighbors 2001; Williams *et al.* 2003). In Britain, analyses of the Fourth National Survey of Ethnic Minorities also suggested a relationship between experiences of racial harassment, perceptions of racial discrimination, and a range of health outcomes across ethnic groups (Karlsen and Nazroo 2002*a,b*). Table 12.8, drawn from these analyses, shows that reporting experiences of racial harassment and perceiving employers to discriminate against ethnic minority people are independently related to likelihood of reporting fair or poor health, and that this relationship is independent of socio-economic effects.

Elsewhere, it has also been shown that fear of racism *per se* also increases risk of reporting fair or poor health by about 60 per cent after adjustments for age, gender, and class (Karlsen and Nazroo 2004). It may be that these findings represent three dimensions of social and economic inequality operating simultaneously: economic disadvantage (as measured by occupational class); a sense of being a member of a devalued, low-status group (British employers discriminate, fear of racism); and the personal insult and stress of being a victim or potential victim of racial harassment.

## 12.8 Social support, networks, and participation—the significance of ethnic communities?

There is a paradox in the research on African American health that highlights the importance of attending to the cultural strengths and health-enhancing resources that

may exist within disadvantaged ethnic populations. African Americans tend to have higher levels of ill health than whites for most indicators of physical health. At the same time, Blacks tend to have comparable or better mental health than whites (as measured by rates of clinical depression and other commonly occurring psychiatric disorders). The Epidemiologic Catchment Area Study (ECA), the largest study of psychiatric disorders ever conducted in the US, found very few differences between Blacks and whites in the rates of both current and lifetime psychiatric disorders (Robins and Regier 1991). Especially striking was the absence of a racial difference in drug use history and the prevalence of alcohol and drug abuse dependence. Similarly, the National Comorbidity Survey (NCS), the first study to use a national probability sample to assess psychiatric disorders in the US, found that Blacks did not have higher rates of disorder than whites for any of the major classes of disorders (Kessler *et al.* 1994). Instead, lower rates of disorders for Blacks than whites are especially pronounced for the affective disorders (depression) and the substance abuse disorders (alcohol and drug abuse). Consistent with these mental health data, Blacks have markedly lower rates of suicide than whites.

Two social institutions—the family and the church—stand out as crucial for the Black population. Strong family ties and an extended family system are important resources that may reduce some of the negative effects of stress on the health of Black Americans. Historically, the Black church was the most important social institution in the Black community. These churches have traditionally been centres of spiritual, social, and political life and may affect mental health in multiple ways. First, African American churches are involved in providing a broad range of social and human services to the African American community (Lincoln and Mamiya 1990; Williams *et al.* 1999). Second, at least some Black churches serve as a conduit to the formal mental health system (Chang *et al.* 1994), and the African American clergy are actively involved in directly providing mental health services to the community (Neighbors *et al.* 1998). Third, congregation-based friendship networks in Black churches function as a type of extended family and provide supportive social relationships to individuals (Taylor and Chatters 1988). Fourth, participation in private and public religious rituals may buffer the negative effects of stress on mental health (Griffith *et al.* 1980, 1984; Gilkes 1990).

In the UK, there is emerging evidence that the establishment of ethnic minority communities in particular geographical areas may carry benefits, despite the high levels of deprivation in these areas. For example, in contrast to the high deprivation scores for areas where ethnic minority people live, described earlier, ethnic minority people perceive the amenities in the areas where they live more positively than white people do (Karlsen *et al.* 2002). This finding appears to reflect the investment that ethnic minority people have made to establish commercial (such as shops) and civic (such as schools, places of worship, community centres) facilities for their communities, and, importantly, this is related to the quality of life of ethnic minority people (Bajekal *et al.* 2004; Grewal *et al.* 2004).

At the same time, recognition of the existence of such resources should not be used to romanticize them as if they were a panacea for a broad range of adverse living conditions. For example, while networks of mutual aid and support may facilitate survival, they are also likely to provide both stress and support. Similarly, even if religious coping is able to shield Blacks from some of the negative psychological consequences of stress, it appears to be unable to cushion the cumulative effects of exposure to chronic stress on a broad range of physical ailments. Importantly, the evidence on residential segregation and health outcomes is mixed, perhaps reflecting the positives and negatives that go with such segregation (Halpern 1993; Halpern and Nazroo 2000; Karlsen *et al.* 2002; Williams and Collins 2001).

## 12.9 Conclusion

In both the US and the UK, there remain ongoing problems with the data available to explore ethnic inequalities in health. Data often do not contain sufficiently detailed information on the ethnicity of respondents to reflect heterogeneity across ethnic groups and heterogeneity within broadly defined ethnic groups. Socio-economic data are either not collected at all, or collected at very crude levels that are plainly inadequate for drawing comparisons across ethnic groups. Those that are collected invariably reflect current position, rather than risks across the life course. And they do not include other dimensions of social inequality, such as experiences of racial harassment and discrimination and geographically based inequalities.

Nevertheless, a large body of convincing evidence now supports the possibility that ethnic inequalities in health are largely a consequence of socio-economic differentials. This applies across a range of ethnic minority groups and a range of outcomes. In addition, there is a growing body of evidence suggesting that experiences of racial harassment and discrimination, and perceptions of living in a discriminatory society, contribute to ethnic inequalities in health. These findings, however, need to be placed within a wider explanatory framework. Here there are two, not mutually exclusive, routes that can be followed.

These findings could be investigated in terms of how they relate to the individual embodiment of social risks. How do such markers of social inequality relate to psychological and biological markers of stress, and how does this translate into disease outcomes? Here the emphasis is on the causal pathways linking 'exposures' to social and economic inequality to disease outcomes. Importantly, the processes involved might vary across ethnic groups, given differences in social context and possible genetic variations across ethnic groups. So, for example, from an epidemiological perspective, it might be fruitful to explore how social inequality translates to hypertension-related diseases for Black American people in the US and Black Caribbean people in the UK, while it translates into cardiovascular disease for Pakistani and Bangladeshi people in the UK.

However, such an approach avoids more fundamental explanations for the health, economic, and social inequalities related to ethnicity. Here, it is important to consider the centrality of racism to any attempt to explain ethnic inequalities in health. Not only are personal experiences of racism and harassment likely to impact on health, but racism as a social force will play a central role in structuring the social and economic disadvantage faced by ethnic minority groups. The socio-economic differences between ethnic groups should not be considered as somehow autonomous (which is a danger of an approach which attempts to examine the extent to which socio-economic differentials 'explain' ethnic differentials in health). As Oliver and Shapiro (1995) demonstrate, the socio-economic disadvantage of Black people in the US is the outcome of a long history of institutional racism and discrimination that has produced the levels of disadvantage which are currently observed. Similarly, while the post-war migration of ethnic minority people into Britain was driven by a shortage of labour, this process, and the socio-economic disadvantage faced by ethnic minority migrants in the UK, was, and continues to be, structured by racism that has its roots in colonial history (Gilroy 1987; Miles 1982).

The concern, then, is that while the tight focus on the pathways that lead from social and economic disadvantage to poor health should contribute greatly to our understanding of aetiology, it may not contribute to our understanding of social inequality. This focus produces an exclusive concern with inequalities *in health* as an adverse outcome, and how the complex pathways leading to this outcome (which might vary across ethnic groups and across disease outcomes) can be understood and broken. The root cause, wider social inequalities, becomes obscured from view. The policy implications of this are clear—the more difficult and dramatic interventions to address social inequalities can continue to be avoided and health promotion can focus on improving our understanding of pathways and designing interventions along them. Inequalities in health become a problem requiring technical interventions tailored to individual diseases and individual circumstances; they become a problem for individuals rather than a reflection of social malaise. Williams *et al.*'s comments in this regard are worth citing:

There is a temptation to focus on identified risk factors as the focal point for intervention efforts. In contrast, we indicate that the macrosocial factors and racism are the basic causes of racial differences in health. The risk factors and resources are the surface causes, the current intervening mechanisms. These may change, but as long as the basic causes remain operative, the modification of surface causes alone will only lead to the emergence of new intervening mechanisms to maintain the same outcome. (Williams *et al.* 1994, p. 36)

However, understanding the operation of macrosocial factors indicated by Williams *et al.* (1994) and appropriate policy interventions is by no means straightforward. Certainly, there is a need to recognize the overriding importance of national and historical context on the 'making' of ethnic groups; how this is related to economic processes and inequities in this; and how this influences the lives of ethnic minority

and migrant populations. Here, comparisons across industrialized nations may particularly help us to understand the underlying social and economic processes.

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