Race and ethnicity

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Chapter 8: Race and Ethnicity

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Key messages

What are the inequalities? How persistent and how worrying are they?

Some minority ethnic groups experience significantly higher levels of ill-health and premature death than the White majority. However, ethnic patterns of mortality and morbidity are complex and minority ethnic groups do not experience worse outcomes across the board when compared to the White British group.

Among the main enumerated ethnic groups, Pakistani and Bangladeshi people stand out as having the worst health profile (and probably the lowest life expectancies), though most minority ethnic groups have worse general self-reported health than the White British majority. These inequalities are persistent and do not appear to be improving across generations for most groups. It should be remembered, however, that some of the ethnic categories currently in use are broad. These categories conceal important heterogeneity and potentially hide even more disadvantaged 'groups' from view.

There is evidence that other groups about whom very little research has to-date been conducted - notably Gypsies and Travellers, asylum seekers and refugees - have particularly low levels of health and wellbeing.

We summarise the evidence against the main EMF indicators below:

LIFE:

- Direct estimates of life expectancy by ethnic group cannot be computed since ethnic group is not recorded on death registration certificates in Great Britain.
- Country of birth analyses carried out for deaths occurring around the time of the 2001 Census produced all-cause Standardized Mortality Ratios (SMRs) for people aged 20 years and over that, when compared to the population of England & Wales as a whole, were statistically significantly *higher* for: men and women born in Ireland, Scotland, East Africa or West Africa; men born in Bangladesh; and women born in India or Pakistan. Standardized Mortality

Ratios were statistically significantly *lower* for men and women born in China or Hong Kong, for men born in India and for women born in Eastern Europe.

- Recent *indirect* estimates of life expectancy based on a method that uses self-reports of limiting long-term illness (LLTI) and its empirical link to later mortality, suggest that life expectancy is highest among Chinese men and women (estimates of 78.1 years and 82.1 years respectively), and lowest among Pakistani men (77.3 years) and among Bangladeshi women (72.7 years).
- Infant Mortality varies between ethnic groups. Black Caribbean and Pakistani babies are more than twice as likely to die in their first year as White British or Bangladeshi babies.
- There are no direct estimates of cause-specific death rates by ethnicity for the countries of Great Britain. Estimates produced by other means are imprecise and should be treated with caution.
- Analyses of cause-specific deaths by country of birth around the time of the 2001 census produced SMRs for people aged 20 years plus compared to the general England & Wales population for ischaemic heart disease (IHD) that were *high* among men and women born in Ireland, East Africa, Bangladesh, Pakistan or India, men born in Eastern Europe or the Middle East and women born in Scotland. Low SMRs for IHD were observed among men born in West Africa or the West Indies and both men and women born in China or Hong Kong. In young adults (20–44 years of age), very high mortality from IHD was seen for men born in Eastern Europe and in Pakistan.
- This country of birth analysis also found that cerebrovascular disease mortality was higher than the general England & Wales population among men born in all the countries analysed apart from the Middle East. SMRs were also significantly higher than the England & Wales population among women born in Ireland, Scotland, West Africa, Bangladesh, India, Pakistan and the West Indies. Particularly high SMRs for cerebrovascular disease were seen for men and women born in Bangladesh and for men born in West Africa.
- Morbidity data collected in the HSE 2004 showed that reported cardiovascular (including all CVD that had been diagnosed by a doctor) was most prevalent among Irish men (14.5%) and among women in the general population (13.0%). Black African men and Chinese women were significantly *less* likely

than the general population to have any CVD condition. The prevalence of any CVD condition increased markedly with age in all ethnic groups. However, when the analysis is broken down by age-group, Pakistani men and women in the 55+ age-group have the highest levels of CVD.

- There are widespread claims that the rate of decline in mortality from ischaemic heart diseases has been slower in recent years among South Asians than in the rest of the UK population. Though this may be true, it can not be confirmed with certainty from the available data.
- The perception that Black African and Black Caribbean populations have particularly high levels of stroke mortality do not appear to be well substantiated by the available national-level statistics.
- Death rates from cancer by ethnicity are not currently available. Analyses by country of birth for deaths occurring around the time of the 2001 census suggest statistically significantly *higher* mortality from all cancers combined, lung and colorectal cancer among people born in Scotland and Ireland, *lower* mortality for all cancers combined, breast and prostate cancer among people born in Bangladesh (except for lung cancer in men), India, Pakistan and China/Hong Kong. Lower lung cancer mortality was found among people born in West Africa and the West Indies, while higher breast cancer mortality was seen among women born in West Africa (SMR 132) and higher prostate cancer mortality among men born in West Africa (SMR 271) and the West Indies (SMR 198).
- Cancer incidence data by ethnicity are far from perfect and suggest a complex and changing picture. Areas of concern include: higher incidence of prostate cancer in Black males and higher incidence of cervical cancer in Black and South Asian women over 65 years. There are no consistent patterns in terms of survival rates from different cancers across the different ethnic groups.
- The Confidential Enquiry into Maternal and Child Health CEMACH (Lewis 2007) reported that Black African, Black Caribbean and Middle Eastern women were significantly more likely to experience a direct or indirect maternal death than White women. Black African women (including asylum seekers and newly arrived refugees) had a mortality rate six times higher than White women and experienced major problems in accessing maternal healthcare.

- Data on suicide and accidental death by ethnicity are limited. Older analyses by country of birth, using data relating to 1991-3, suggested increased risk of both suicide and accidental death among both men and women born in Scotland or Ireland compared to the general England & Wales population, but not among other migrant groups. However, a recent analysis of suicides occurring within 12 months of contact with mental health services in England & Wales (which employed broad, clinician-assigned, ethnic groups) suggests elevated risks of suicide among some minority ethnic groups. These include young Black Caribbean and Black African men aged 13-24 years, as well as women aged 25-39 years of South Asian, Black African and Black Caribbean ethnicity when compared to the White group.

HEALTH:

- For the measures of general self-reported poor health and limiting long-term illness, the Pakistani and Bangladeshi groups stand out as having the worst health. Census data for England & Wales and also for Scotland show high proportions of these groups reporting poor health and LLTI, while Chinese males and females report low levels. At older ages, Indian men and particularly women, also report high levels of poor health. The White Irish population in England also faces significant health disadvantage when compared to the White British.
- Patterns of mental wellbeing by ethnicity are complex and there are ongoing debates as to how easily psychiatric morbidity can be assessed across cultural and linguistic groups. In the HSE 2004 Pakistani men and women and Bangladeshi men were more likely to have a high GHQ12 score than the general population. Findings from EMPIRIC suggest very few ethnic differences in the prevalence of common mental disorders once age is adjusted for, with only Bangladeshi women standing out as having a lower risk than White women.
- Asylum seekers and refugees may face particular mental health issues because of past experiences of torture and abuse as well as the extreme stress associated with their dislocation. Gypsies and Travellers also appear

to face high levels of emotional and psychological distress associated with a lack of control over their lives, forced relocation and societal discrimination.

- Some particular health issues are of concern among some migrant and minority ethnic groups, including diabetes, some infectious diseases (including TB and HIV), haemoglobinopathies, and female genital mutilation.

Process

- The broader tension between two wings of policy - immigration control (and the associated concerns with community cohesion and preservation of British identity) on the one hand and race equality on the other - is evident within the health arena. This comes most sharply into focus when examining the healthcare experiences and outcomes of asylum seekers, refugees and new migrant communities; though it is also a common thread underlying the poor provision and persistent inequalities of established minority ethnic populations.

- There is a large body of evidence that documents the poorer experiences and lower level of satisfaction with NHS health services experienced by minority ethnic groups as compared to the White British majority. The latest figures from the Care Quality Commission confirm that people of South Asian and Chinese origin report less positive experiences than the White British majority across a range of care settings, but that differences are particularly noticeable in primary care. In 2008/9, compared to White British people, people of Asian/Asian British ethnicity had an odds of reporting that they were always treated with dignity and respect by their GP of 0.5, while for Chinese people it was just 0.3.

- Other evidence suggests that Gypsies and Travellers have extremely poor experiences of primary care and may face significant obstacles to registering with a GP. There are also particular access issues facing asylum seekers and refugees.

- The disproportionately high levels of detention of Black Caribbean and Black African men in secure psychiatric institutions as well as their increased likelihood of receiving coercive intervention and compulsory detainment represent enduring and worrying inequalities.

- Poor communication is a commonly cited problem and there are widespread inadequacies in interpretation and translation facilities. Furthermore, communication barriers are not merely an issue for those who cannot speak English. Poor listening, dismissiveness, rushed consultations and disrespectful attitudes are factors that have been found to undermine patient-provider communication for many minority ethnic people even if they can speak English.

- Concerns about coercive and disrespectful care are particularly evident within mental health and maternity services.

- Despite numerous broad policy directives and strategy documents that signal the importance of understanding and tackling ethnic inequalities in health, there is a lack of detailed and systematic attention to the needs of minority ethnic populations in action plans and service specific policy documents, such as National Service Frameworks, though there are some areas of good practice.

- There is a widespread lack of collection and application of local ethnic monitoring data in the commissioning and evaluation of services. Many Primary Care Trusts do not have accurate figures on the make-up of their populations by ethnicity.

- Effective diagnosis and treatment may be undermined when minority ethnic people do not present with the 'typical' symptoms that have been identified on the basis of research and clinical experience with the majority White British population. For instance, compared with White British people, South Asians are more likely to experience 'atypical' symptoms during myocardial infarction which may delay diagnosis or optimal intervention. They are also less likely to be prescribed lipid-lowering medications and are more likely to withdraw from cardiac rehabilitation programmes.

- Health-related life-style factors vary greatly across ethnic groups and there are no clear patterns whereby minority ethnic groups are exposed to increased health risk across a range of behaviours. Issues that are of particular cause for concern include: high levels of smoking among Bangladeshi men (HSE 2004 found 40% of Bangladeshi men were smokers compared with 24% of men in the general population); frequent and heavy drinking among White Irish men and women; and high levels of obesity and raised waist circumference among Pakistani and Black Caribbean women. Levels of physical activity among men and women are lower among all the minority ethnic groups, except the White Irish, when compared to the general population. In contrast, minority ethnic people (except the White Irish), particularly men, are more likely than the general population to report eating the recommended amounts of fruit and vegetables.

Autonomy

- Lack of access to information and lack of familiarity with the system appears to make it more difficult for people from some minority ethnic backgrounds to exercise choice in terms of their healthcare and this is particularly true for new migrants and those with poor English language skills.

- Culturally incompetent services and practitioners can restrict the ability of people from minority ethnic backgrounds to engage with services in the ways that they would prefer. For instance, factors such as a lack of facilities for family members to be involved, inappropriate dietary provision, and a lack of privacy, particularly for women, can result in poor patient experiences and withdrawal from services/treatments.

- A lack of choice and control over their lives and the pervasive experience of discrimination are prominent issues for Gypsies and Travellers, as well as asylum seekers, that impact negatively on their health and well-being.

Cross over themes and vulnerable groups

There are complex patterns of ethnic inequalities in LIFE and HEALTH by other axes of inequality, particularly sex/gender, age and socioeconomic status. We discuss these in more detail below.

A number of human rights concerns have been identified by Aspinall and Watters (Aspinall and Watters 2010) in relation to the health of asylum seekers and refugees including:

- Difficulties accessing GP treatment and consequent increased reliance on A and E services.
- Uncertainty and lack of clarity among service providers about asylum seekers' eligibility for secondary healthcare services resulting in care being withheld in some cases.
- Inadequate response to communicable diseases, particularly TB. The health of asylum seekers with HIV/AIDs is negatively affected by the policy of dispersal at short notice and chargeable HIV treatment for refused asylum seekers.
- Human rights implications around the deportation of failed asylum seekers with HIV/AIDS.
- Institutional failure to address health concerns of asylum seekers in detention (particularly in relation to children's health, mental health, treatment for those with HIV and access to female GPs, especially for women who have suffered rape and sexual violence). Aspinall and Watters (2010) summarise the conclusions of the Joint Committee as follows *"The Committee concluded that it had concerns about the extent to which the quality of healthcare provided to asylum seekers in detention is fully compliant with international human rights obligations. Particular concern was expressed about gaps in care for people with HIV and with mental health problems and with procedures for identifying and supporting torture victims. The Committee recommended that female GPs and other medical practitioners should be available in detention centres where women are held."*

Gypsies and Travellers also stand out as another 'group' that is particularly vulnerable across outcome, process and autonomy aspects of the LIFE and HEALTH capabilities.

Finally, some groups of minority ethnic women, particularly those who do not speak English, are recently arrived in Great Britain, who have poor social networks and/or who are elderly emerge as particularly vulnerable to poor health outcomes and poor healthcare experiences.

Are there any emerging trends?

- New migrant communities have different health needs from established minority communities, and there are signs that their health and life outcomes may be poor.

- Increasing ethnic, linguistic and cultural diversity demands new responses from health services. At the same time, an increasing proportion of people are claiming a 'mixed' ethnic identity.

- Some of the factors that seemed to protect/enhance health for first generation migrants appear to be diminished in second and third generation migrants e.g. dietary habits. Some health advantages in first generation migrants are not well explained, but the picture among second generation migrants is worsening e.g. there is a rising incidence of some cancers.

What are the causes?

- Ethnic inequalities in health are complex and have multiple contributing factors, many of which remain poorly understood.

- Genetic/biological factors appear to contribute in part to some of the excess risks of ill-health faced by some minority ethnic groups. However, socially constructed ethnic groups are poor markers for genetic traits and evidence suggests that social, economic and health system related factors are far more important factors in explaining the large differences observed in health outcomes between groups.

- Holding a particular ethnic identity may imply certain sets of beliefs and behaviours that have implications for health and healthcare outcomes and experiences. Therefore, though there is great diversity within groups as well as change over time in cultural practices, at an aggregate level culturally informed beliefs, attitudes, preferences and associated behaviours may account for some of the observed inequalities. The most obvious area where these factors may be important relates to healthy life-styles; though it should be noted that minority ethnic groups do better than the White British majority on some key life-style related risks including alcohol consumption and smoking among women.

- Socioeconomic deprivation plays a significant part in the excess poor health faced by some minority groups - notably Bangladeshi and Pakistani Muslims. There is also evidence that access to state welfare benefits intended to offset the financial implications of poor health is poorer among minority ethnic groups than the majority White British. However, this is only part of the story and socioeconomic disadvantage does not explain the complex patterns of health observed across all ethnic groups, or the areas where minority groups fare better than the White British majority.

- There is growing evidence that racism plays a role in the poorer health of minority ethnic populations both via direct personal experience of racist victimisation or discrimination and fear of or expectation that racism may be encountered. The pervasive experience of racism in day-to-day life may also increase the likelihood of negative experiences and low satisfaction with health services.

- There is also evidence that the experience of statutory services, including but not limited to health services, can exacerbate the poor mental and physical health of minority ethnic people by being unresponsive, inappropriate and stressful.

- There is growing evidence of differentially poor access to key primary and secondary preventive and curative health services among minority ethnic groups that could help to reduce inequalities in the major causes of morbidity and mortality - e.g. uptake of cancer screening; access to smoking cessation services etc.

Data quality and quantity

- There has been a significant increase in the availability of health-related information disaggregated by ethnic group and in the volume of research that addresses the health outcomes and needs of minority ethnic groups in the UK over the past 10-15 years. However, most of this information relates to England and there is a limited picture of the health profiles of minority ethnic populations in Wales and Scotland.

- Routine health data sources still frequently fail to collect ethnicity data that is sufficiently complete and consistent to sustain robust analyses, a situation that the Association of Public Health Observatories (APHO) has recently described as 'unacceptable' (APHO, 2007).

- In addition, national surveys often employ sampling schemes that produce samples of insufficient size to sustain detailed analyses by ethnic group. Often groups are collapsed into large, heterogeneous categories that are unhelpful in understanding patterns or causes of health inequality. While the Health Survey for England (HSE) in 1999 and 2004 employed 'ethnic minority boost samples', the national surveys in Wales and Scotland have not adopted this approach at any time so that sample sizes are too small for meaningful analyses by ethnicity.

- Though there are clear advantages to the use of standardized, statutory ethnic categories, these are often not particularly helpful in terms of identifying groups of individuals with common health experiences and outcomes. For instance, the 'Black African' and the 'Other White' categories are particularly broad and unhelpful.

- A number of national surveys have recently added important information to our understanding of ethnic health inequalities including the Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) survey in 2000 and the HSE in 1999 and 2004. There have also been important new developments in terms of record linkage such as that using the NHS Numbers for Babies (N4BB) that has allowed estimates of infant mortality by ethnicity for the first time, as well as innovative techniques for indirectly estimating levels of morbidity and mortality by ethnicity.

- Though patterns of ethnic inequalities in health are now well-documented for the largest minority groups in England, there is a lack of evidence regarding (i) the multifaceted causal processes that contribute to poorer experiences of health services and poorer outcomes for some groups, and particularly (ii) how best to intervene to address poor health. Though there have been some important initiatives to address health disadvantage among minority ethnic groups, by-and-large these have been small-scale, local projects that have not been rigorously evaluated or scaled-up. In the absence of such detailed knowledge there is a danger that policy and practice responses can serve to further stereotype, stigmatise and marginalise minority groups. In addition, the research literature is heavily dominated by studies of the health needs and experiences of South Asian groups, with less evidence relating to other large minority groups, particularly Africans and Chinese.

- Within the broad migrant and minority ethnic population, there are some groups about which there is very limited information including: new White migrant communities, asylum seekers and refugees, Gypsies and Travellers and people of 'mixed' ethnicity.

How might change be better measured?

- Improved ethnic monitoring at primary care level is essential. The Quality and Outcomes Framework dataset could potentially be used to provide individual-level data rather than simply aggregated practice-level data that do not enable analyses by patient characteristics.

- Specialist efforts are needed to gather robust data for 'hidden' minority populations including: Gypsies and Travellers (including those who are housed), new migrant communities, asylum seekers and refugees.

- As with religion, there is a need for the collection of data that can enable a better understanding of process and autonomy – causal pathways cannot be inferred from descriptive analyses of inequalities between groups since ethnicity can be a proxy for multifarious factors that may impact upon health. It is likely that multi-disciplinary and cross-national comparative research will be helpful here.

- More research is needed that focuses on identifying effectiveness, and cost effectiveness, of interventions aimed at reducing ethnic health inequalities.

- The inclusion of indicators of access to healthcare services might usefully supplement the Equality Measurement Framework (EMF) (while acknowledging the complexities of establishing inequities in access). In particular, access to GP services and preventive measures (including screening) should be monitored. In addition, access to interpretation and translated information should be monitored since this is a major factor undermining quality of care and equitable outcomes for some minority ethnic people.

Evidence: Data quality and quantity

There has been a significant increase in the availability of health-related information disaggregated by ethnic group and in the volume of research that addresses the health outcomes and needs of minority ethnic groups in the UK over the past 10-15 years. However, most of this information relates to England and there is a limited picture of the health profiles of minority ethnic populations in Wales and Scotland.

The 2001 Censuses of England, Scotland and Wales collected information on ethnicity and provide a general picture of the health status of the different ethnic groups in the three countries. Census data also provide the best available estimates of the size of the minority ethnic populations in the three countries. Table 1 shows the percentage distribution and numbers of people belonging to each of the main enumerated ethnic groups in the 2001 Census of England.

Table 1: Population of England: by ethnic group, April 2001

	Numbers	Percentages
White British	42,747,100	87.0
White Irish	624,100	1.3
Other White	1,308,100	2.7
White	**44,679,400**	**91.0**
Mixed	**643,400**	**1.3**
Indian	1,028,500	2.1
Pakistani	706,500	1.4
Bangladeshi	275,400	0.6
Other Asian	237,800	0.5
Asian or Asian British	**2,248,300**	**4.6**
Black Caribbean	561,200	1.1
Black African	475,900	1.0
Other Black	95,300	0.2
Black or Black British	**1,132,500**	**2.3**
Chinese	**220,700**	**0.4**
Other	**214,600**	**0.4**
All non-white	**4,459,400**	**9.0**
All population	**49,138,831**	**100**

Source: Census 2001, ONS
Note: Numbers rounded to nearest 100.

ONS have produced experimental estimates of the ethnic composition of the populations of England and of Wales for 2007 using a cohort component method taking the 2001 Census population as the population base. In 2007, the total proportion of the population of England that were of minority ethnic identity (i.e. other than White British) was estimated to be around 16%. The proportion of people reporting a 'mixed' ethnic identity and a 'White other' ethnic identity have particularly increased over the period since the last Census.

In comparison to England, the total minority ethnic population of Wales is much smaller, comprising around 4% of the population, with the non-White population comprising 2% (Table 2). The Indian and Pakistani groups were the largest, with around 8,200 people in each.

Table 2: Population of Wales: by ethnic group, April 2001

	Numbers	Percentages
White British	2,786,605	96.0
White Irish	17,689	0.6
Other White	37,211	1.3
White	**2,841,505**	**979**
Mixed	**17,661**	**0.6**
Indian	8,261	0.3
Pakistani	8,287	0.3
Bangladeshi	5,436	0.2
Other Asian	3,464	0.1
Asian or Asian British	**25,448**	**0.9**
Black Caribbean	2,597	0.1
Black African	3,727	0.1
Other Black	745	0.03
Black or Black British	**7,069**	**0.2**
Chinese	**6,267**	**0.2**
Other	**5,135**	**0.2**
All non-white	**61,580**	**2.1**
All population	**2,903,085**	**100**

Source: Census 2001, ONS
Note: Numbers rounded to nearest 100.

In 2007, the total proportion of the population of Wales that were of minority ethnic identity (i.e. other than White British) was estimated to be almost 3%, compared to

2% recorded in the 2001 census (Statistics for Wales 2010). This represents 86,300 people. The largest ethnic groups were the Asian or Asian British categories; Indian, 13,600 people, Pakistani, 11,000 and Bangladeshi, 6,500 people.

Table 3: Population of Scotland: by ethnic group, April 2001

	Numbers	Percentages
White Scottish	4,459,000	88.1
Other White British	373,700	7.4
White Irish	49,400	1.0
Other White	78,200	1.5
White	**4,960,300**	**98.0**
Mixed	**12,800**	**0.3**
Indian	15,000	0.3
Pakistani	31,800	0.6
Bangladeshi	2,000	0.04
Other Asian	6,200	0.1
Asian or Asian British	**55,000**	**1.1**
Black Caribbean	1,800	0.04
Black African	5,100	0.1
Other Black/Black Scottish	1,100	0.02
Black or Black British	**8,000**	**0.16**
Chinese	**16,300**	**0.3**
Other	**9,600**	**0.2**
All non-white	**101,700**	**2.0**
All population	**5,062,000**	**100**

Source: 2001 Census of Scotland., The Scottish Government.
Note: Numbers rounded to nearest 100.

The minority ethnic population of Scotland is also much smaller than in England at just over 100,000 in 2001 or 2% of the total population of Scotland (Table 3). Pakistanis are the largest minority ethnic group, followed by Chinese, Indians and those of Mixed ethnic backgrounds. The size of the minority ethnic population in Scotland increased between the 1991 and 2001 Census by 62.3%.

Given the differing sizes of the minority ethnic populations across England, Scotland and Wales it is perhaps not surprising that there is a much greater volume of data for England than the other two countries. The Scottish Public Health Organisation has commented that *'Understanding needs and monitoring progress is hampered by the* *severe lack of routine information on the health of minority ethnic groups in Scotland. Work is in progress to improve the routine collection of data on ethnicity in order to address ethnic inequalities in health'* (ScotPHO 2010)*.*

A similar situation exists in Wales. Much of the following discussion therefore relates to England rather than to Scotland or Wales.

Routine health data sources still frequently fail to collect ethnicity data that is sufficiently complete and consistent to sustain robust analyses, a situation that the APHO has recently described as 'unacceptable' (2007) Hospital trusts have been required to collect ethnicity data for all in-patients since 1996, though these data are still of variable completeness and quality. In primary care the collection of ethnicity data is not mandatory, though GP practices are encouraged to collect these data via incentives in the Quality and Outcomes Framework as well as via Directed and Local Enhanced Services (carrying additional financial incentives) where these operate. Furthermore, ethnic monitoring in primary care is not a newly introduced idea, and there has been commentary on this area of work and examples of good practice in England from the 1990s onwards (Pringle and Rothera 1996; Aspinall and Jacobson 2006). Despite this, a recent review by the King's Fund concluded that in general Primary Care Trusts (PCTs) did not have adequate data on the ethnic make-up of their populations to inform the commissioning or evaluation of health services, though a few PCTs were found to be very active in trying to meet the local needs of their multiethnic populations. It can be argued that a failure to collect and report these data is in contravention of the RR(A)A 2000, since without such information it is not possible to assess whether services are being delivered equitably. Despite these shortcomings, some useful analyses of Hospital Episodes Statistics and local primary care data have been conducted, mainly at a local level, and techniques promoted for coping with inadequate data (Aspinall and Jacobson 2007)

Turning to survey data, by-and-large national surveys in England, Scotland and Wales employ representative sampling schemes that produce samples of insufficient size to sustain detailed analyses by ethnic group. During analyses of such survey datasets ethnic groups are often collapsed into large, heterogeneous categories that are unhelpful in understanding patterns or causes of health inequality. However, in

England some recent population-based health-related surveys have been specially designed to have 'booster samples' of minority ethnic people - including the Health Survey for England in 1999 and 2004 which took a special focus on the health of minority ethnic groups in these years, and the Ethnic Minority Psychiatric Illness Rates in the Community Survey, 2000. No similar surveys have yet been conducted in Scotland or Wales.

Health Survey for England 2004

This was the fourteenth annual survey of health in England covering adults aged 16 and over living in private households in England as well as children aged 0 to 15, who live in households selected for the survey. Like the 1999 survey, this survey focused on the health of adults from various minority ethnic groups in England. Additional households were included in the survey to increase the number of Black Caribbean, Black African, Indian, Pakistani, Bangladeshi, Chinese and Irish participants. The sampling approach for most of the minority ethnic groups was based on a version of focused enumeration. A different approach was needed for the Irish and the sampling approach for the Chinese group included screening the electoral register for 'Chinese sounding' surnames to identify wards with higher numbers of potentially eligible respondents. Comparative analyses were performed with the general population in England. The survey included core questions and measurements (including blood pressure, anthropometric measurements and analysis of blood, saliva and urine samples) taken during a nurse visit. The survey yields a range of information on general health, chronic and acute health conditions, health risks, health-related behaviours and medications.

Further details of the methodology of the survey are available here:
http://www.ic.nhs.uk/webfiles/publications/healthsurvey2004ethnicfull/HealthSurveyforEnglandVol2_210406_PDF.pdf

Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) 2000

This survey was carried out among ethnic minority adults aged 16-74 living in England in 2000 to make comparisons with the prevalence of psychiatric morbidity in the general population. The survey used the existing 1999 Health Survey for England, which had a focus on minority ethnic groups, to draw its sample. The survey consisted of two elements, a quantitative survey of rates of mental illness among different ethnic groups in England and a qualitative study investigating ethnic and cultural differences in the context, experience and expression of mental distress. Measures of mental health included in the survey were designed to be administered by a survey interviewer and to be used in a fully structured interview. The survey did not include a follow-up clinical interview administered by a trained clinician.

Further details of the methodology of the survey are available here:

http://www.archive2.official-documents.co.uk/document/deps/doh/empiric/chapter1.htm#1.3

Other national surveys including the Labour Force Survey and the General Household Survey can and have been used to explore general patterns of health by ethnic groups, often by pooling several years of data, but these do not collect such detailed information on health conditions or health-related risk factors.

While a number of surveys fielded in Scotland collect information on health and ethnicity - such as the Scottish Health Survey or the GLF - the numbers of minority ethnic respondents included in any one year are too small to sustain meaningful analyses. For instance, the following figures were supplied by the Scottish Government for the total number of respondents in the 2008 SHeS by self-reported ethnicity: White Irish (48), Indian (26), Pakistani (31), Bangladeshi (1), Chinese (6), Black Caribbean (6) and Black African (13). Even aggregating data across two or three years would not yield numbers to sustain analyses. Nevertheless, the health of minority ethnic groups has received quite a lot of attention in Scotland, largely the result of an active group of researchers at the University of Edinburgh, and Scotland has recently published an 'Ethnicity and Health Research Strategy' (The Scottish Ethnicity and Health Research Strategy Working Group 2009)

Surveys of health service users have also produced some useful data in recent years that allow examination of the differential experiences of patients across ethnic groups. These include the GP Access Surveys, the Quality Care Commission Patient Satisfaction Surveys and the Count me In Census of in-patient mental health service users that has been conducted annually from 2005 to 2010. Similar surveys in Scotland and Wales have not included sufficient numbers of minority ethnic respondents to enable analyses by ethnicity.

In addition to national datasets, over the past 10-20 years the volume of research into ethnicity and health has grown rapidly in the UK, mostly in England and to a lesser extent also in Scotland. There are a number of large-scale special surveys as well as many smaller-scale qualitative and clinically-focused studies that have collected data that allow comparisons between minority ethnic groups and the majority White British population (see for instance Harding et al., 2007).

Data relating to Gypsies and Travellers' health is extremely limited and the invisibility of this severely socially excluded group is a major concern. Health service commissioners and planners commonly operate in the absence of any information on the size or needs of these communities. We draw on one special study extensively in the sections that follow - the Health Status of Gypsies and Travellers 2004 (Parry et al. 2007) - since it is the only study of any size that has explored health among this particularly disadvantaged group.

Health Status of Gypsies and Travellers 2004 (Parry et al. 2007)

Currently the only substantial, quantitative study of the health of Gypsies and Travellers in the UK, this study was carried out in 2002 and included a relatively modest sample size of 293 'Gypsy-Travellers' across five locations: London, Bristol, Sheffield, Leicester and Norfolk. This study employed a survey including standard health measures, supplemented by 27 in-depth interviews to explore health experiences, beliefs and attitudes. The study identified distinct groups: English Gypsies, Welsh Gypsies, Scottish Gypsy Travellers and Irish Travellers, and sampled in such a way as to include English/Welsh and Irish Traveller samples. The majority of the results are presented for the total group combined, though some differences within the sample are highlighted. The study also included a matched comparator sample of 260 people matched for age and sex and living in one of the five locations, including British people in White, Pakistani, Black Caribbean ethnic groups, urban and rural environments, and those who were socio-economically deprived. All participated in a structured health interview including standardised measures of health status and specific illnesses, medication use, and health service contacts.

Further details of the study are available here:
http://www.sheffield.ac.uk/content/1/c6/02/55/71/GT%20report%20summary.pdf

Despite the upsurge in interest and data, some important gaps remain, as well as significant concerns about the quality and usefulness of some of the research that has been conducted on ethnic inequalities in health. The important gaps are summarised below:

- Ethnicity is not currently collected at death or birth registration.
- Ethnic monitoring in primary care remains poor meaning that there is a lack of up-to-date information on population size by ethnic group and hence an absence of denominators for the calculation of rates of disease, admissions to hospital and so on. Census projections are the most accurate information on population size by ethnic group in many places.
- South Asian groups have been studied much more than other ethnic groups and there remains relatively little research on the health of Black African groups or Chinese. This is both because sample sizes in national datasets are too small for many groups, but also because focused studies have tended to examine the

situation of South Asians more than other groups, perhaps because they are large in size and often geographically concentrated.
- New migrant groups are not included in most datasets and most research studies.
- There is a lack of attention to White ethnicities and limited data on White minority groups.
- Asylum seekers, refugees and Gypsies and Travellers are groups that are known to have very poor health and healthcare experiences but for which the available data is extremely limited. Aspinall and Watters report that the first data arising from a survey of refugees and a migrant survey instigated by the Home Office should be available from 2010 (Aspinall and Watters 2010).

It is worth noting that a variety of approaches have been adopted in the absence of adequate ethnicity data. These include:

- Record linkage: For example, the recent introduction of NHS Number for Babies at birth and the collection of ethnicity in this record plus record linkage to birth registration data have recently enabled the analysis of birth outcomes and infant mortality by ethnicity. Similarly, NHS Hospital Episode Statistics and national cancer register data have been combined in order to create a National Cancer Data Repository which has resulted in analyses of cancer incidence by ethnicity. Significant record linkage has also been taking place in Scotland to help fill the gaps in information about ethnicity and health there (Fischbacher, et al. 2005; Bhopal, et al. 2005).

- Country of birth: Analyses have frequently employed country of birth either as a proxy for minority ethnicity (which is becoming increasingly problematic) or to produce analyses for migrants versus UK-born. For instance, recent analyses by Harding and colleagues (Harding, Rosato and Teyhan, 2008) of cause-specific mortality rates over time for migrant groups has shown evidence of some widening in disparities for migrants from particular countries over time.

- Imputation and other techniques to get around the problems of missing data.

- Use of name algorithms (Cummins et al. 1999; Nanchahal et al. 2001) to assign ethnicity to respondent/patient records. Though useful in some settings, these techniques can not be applied to all ethnic groups or all contexts.

In addition to issues relating to the quantity and quality of data, a number of conceptual and methodological issues have been highlighted by researchers interested in understanding and tackling ethnic inequalities in health. These have been summarised elsewhere (Bradby 2003; Salway et al. 2009; Salway and Ellison 2010). In brief, these relate to the importance of researchers and users of research evidence:

- recognising that the term 'ethnicity' is used in diverse and contradictory ways and that the multifaceted nature of ethnicity and its varied influences on health outcomes and experiences should be acknowledged;

- recognising that ethnic categories are socially constructed varying across time and place, are not natural or neutral, and are inevitably crude markers of health-related risk;

- exploring diversity within, and similarities across, ethnic groups as well as differences between ethnic groups since many important health issues affect individuals across ethnic groups similarly and other axes of disadvantage (such as gender and socioeconomic deprivation) cut across ethnic groups;

- acknowledging that though the 2001 Census categories have been carefully tested for acceptability and salience with the general public, they do not necessarily delineate groups of individuals who have similar experiences of health or healthcare services. Some groups are particularly broad and unhelpful in this regard and conceal important heterogeneity (for instance in religion, language, socioeconomic circumstances and so on);

- being aware that data collection instruments - such as survey questions asking about self-perceptions of health - may operate differently across ethnic and language groups thereby compromising comparisons;

- recognising that simple comparisons between ethnic groups can tell us nothing about the underlying causal factors explaining any differences and that caution is needed in drawing conclusions unless information is available on all potential explanatory factors; and

- appreciating the ways in which research on ethnic inequalities in health and healthcare can be misinterpreted and misused if not carefully managed and can serve to further stereotype, marginalise and stigmatise minority groups if not conducted with ethical and scientific rigour.

Though the data situation has improved considerably in recent years in England, much more needs to be done in Scotland and Wales before an adequate picture of ethnic inequalities can be ascertained. In addition, there are areas in need of further information across all three countries. While some of these undoubtedly require significant resource investments and/or the development of innovative methods (for instance for sampling dispersed refugee populations) there are also some 'missed opportunities'. The key issues are highlighted here:

- Improved ethnic monitoring at primary care level is essential and further efforts should be made to support Primary Care Trusts to ensure this. Furthermore, the Quality and Outcomes Framework dataset could potentially be used to provide individual-level data rather than simply aggregated practice-level data that do not enable analyses by patient characteristics.

- Some datasets that currently collect individual-level data on ethnicity - such as the CQC Patient Satisfaction Surveys - are not routinely deposited in the UK data archive with this variable included so that further secondary analysis is not easily possible. While recognising the need to ensure adequate data protection mechanisms are in place, steps should be taken to promote further analyses of such datasets.

- Specialist efforts are needed to gather robust data for 'hidden' minority populations including: Gypsies and Travellers (including those who are housed), new migrant communities, asylum seekers and refugees.

- As with religion, there is a need for the collection of data that can enable a better understanding of process and autonomy – causal pathways cannot be inferred from descriptive analyses of inequalities between groups since ethnicity can be a proxy for multifarious factors that may impact upon health.

- More research is needed that focuses on identifying effectiveness, and cost effectiveness, of interventions aimed at reducing ethnic health inequalities. Though there have been some important initiatives to address health disadvantage among minority ethnic groups, by-and-large these have been small-scale, local projects that have not been rigorously evaluated and this hampers progress towards rolling out better service approaches for minority ethnic people. At the same time, well-designed healthcare evaluation studies commonly fail to include participants from minority ethnic backgrounds and/or to analyse outcomes by ethnicity, so that we know little about the (potentially) differential benefits of such interventions across ethnic groups. In the absence of such detailed knowledge there is a danger that policy and practice responses can serve to further stereotype, stigmatise and marginalise minority groups.

- The inclusion of indicators of access to healthcare services might usefully supplement the Equality Measurement Framework (EMF) (while acknowledging the complexities of establishing inequities in access). In particular, access to GP services and preventive measures (including screening) should be monitored. In addition, access to interpretation and translated information should be monitored since this is a major factor undermining quality of care and equitable outcomes for some minority ethnic people.

LIFE: main indicators

Life expectancy and mortality

Ethnicity is not collected at death registration in England, Scotland or Wales meaning that routine mortality statistics are not produced disaggregated by ethnic group. It is not therefore possible to produce direct estimates of the life expectancy measures or the cause-specific mortality rates that are included in the EMF by ethnic group.

In the absence of direct estimates, a number of other approaches have been adopted in order to gain some indication of the levels of mortality experienced by minority ethnic populations in comparison with the majority White British.

All cause mortality by country of birth: around 1991

The first approach has been to use country of birth as a proxy for ethnic group. Country of birth is recorded at the time of death (by a proxy respondent), and for newer migrants is a reasonable proxy for ethnicity. However, over time this approach has become less satisfactory as a growing proportion of the minority ethnic population of Britain are British-born. There are also some historical factors that can make country of birth an inaccurate indicator of ethnic identity. For instance, Fischbacher et al. (2005)) report that a large proportion of older people living in Scotland who report their country of birth as India are of White British ethnicity as they were born to British parents living in India during the colonial period. Another example would be older people who would report their ethnicity as Bangladeshi, but whose country of birth would be Pakistan since they were born prior to the formation of Bangladesh in 1971.

Despite these shortcomings, a number of analyses have been carried out using country of birth in order to gain some insights into the patterns of mortality among migrant minority groups in Great Britain. Though these are now rather out-of-date, we reproduce below the standardized mortality ratios computed by Gill et al. (2002) and by Maxwell and Harding (1998) using broadly similar methods (though different country of birth categories) and data from around the 1991 Censuses of England and

Wales. Gill et al.'s (2002) analyses suggest that among males, people born in India, West and South Africa and Bangladesh have a higher mortality level than the England and Wales population as a whole, while those born in Pakistan and China/Hong Kong/Taiwan have lower mortality. Among females, those born in India and the Caribbean had higher mortality than the England and Wales standard, while those born in Pakistan, Bangladesh and China/Hong Kong/Taiwan had lower mortality (Table 4). Maxwell and Harding's (1998)) analyses group all South Asian born together and suggest that men born in this region have higher mortality than the overall England & Wales population, but that women born in South Asia do not differ in their mortality level from the standard. Elevated mortality is seen among both men and women born in Scotland or in Ireland, while Caribbean-born men appear to have lower mortality (Table 5). As noted above, it is important to remember that these analyses do not include minority ethnic people who were born in Britain, and these made up around 44% of people identifying as Indian, Pakistani or Bangladeshi in the 1991 census and around 54% of Black Caribbean people (percentages that were even higher in the 2001 Censuses).

Table 4: All cause Standardized Mortality Ratios (indirectly standardized using the England & Wales 1991 census population) 20-74 years by country of birth, England & Wales 1989-92

Country of birth	Males	Females
India	**103**	**113**
	[2,318]	[1,883]
Pakistan	**90**	**83**
	[571]	[267]
Bangladesh	**114**	**70**
	[255]	[53]
Hong Kong/China/Taiwan	**79**	**88**
	[218]	[201]
Caribbean	98	**111**
	[1,200]	[798]
West and South Africa	**108**	107
	[198]	[102]

Source: (Gill, et al. 2002)
Notes: 95% confidence intervals given in brackets. Average number of deaths per year in [] All people resident in England and Wales = 100. * indicates statistically significantly different from the standard England and Wales population.

Table 5: All cause standardised mortality ratios (SMR) by country or region of birth and sex, 20–64 years, England and Wales 1991–93

Country of birth	Males	Females
Caribbean	**89**	104
	[1,680]	[1,095]
Indian sub-continent	**107**	99
	[4,114]	[1,877]
Scotland	**129**	**127**
	[4,596]	[2,391
Ireland	**135**	**115**
	[5,994]	[3,191]

Source: (Maxwell and Harding 1998)
Notes: Numbers of deaths in []. All people resident in England and Wales 1991 = 100. Bold indicates statistically significantly different from the standard England and Wales population.

All cause mortality by country of birth: around 2000

Wild et al.'s (2007)) analyses found that SMRs for all-cause mortality were statistically significantly higher than for England and Wales as a whole for: men and women born in Ireland, Scotland, East Africa or West Africa; men born in Bangladesh; women born in India or Pakistan. SMRs for all-cause mortality in the broad age group 20 years plus were statistically significantly below the national average for men and women born in China or Hong Kong, for men born in India and for women born in Eastern Europe. For most populations, similar patterns were seen when narrower age bands were examined, with differences persisting into the oldest age group (≥70 years). However, men born in Bangladesh had a statistically significantly low SMR in the 20–44-year age group but high SMRs in the older age groups and men born in Eastern Europe had statistically significantly high SMRs in the 20–44- and 45–59-year age groups but SMRs similar to that of the national average in the oldest two age groups. Women born in West Africa had a significantly elevated SMR for the broad age group (≥20 years) but a statistically significantly lower SMR for all-cause mortality among the oldest age group. Table 6 reproduces Wild et al.'s figures for all cause SMRs.

Table 6: Numbers of deaths and all–cause SMRs by sex and country of birth for people aged 20 years and over, England & Wales 2001

Country of birth	Males		Females	
	No. of deaths	SMR	No. of deaths	SMR
England and Wales	663,116	**97**	756,899	**97**
Scotland	18,147	**113**	17,077	**109***
Ireland	20,939	**128**	20,484	113*)
Eastern Europe	7,990	102	3,852	**96***
East Africa	1,792	**105**	1,194	**108***
North Africa	759	100	711	107
West Africa	1,238	**117**	807	**121***
West Indies	5,240	102	3,562	98
Middle East	2,266	98	1,502	97
Bangladesh	1,291	**120**	465	98
India	7,977	96	7,260	**104***
Pakistan	2,878	99	1,934	**106***
China and Hong Kong	987	83	877	**82***

Source: (Wild et al. 2007)
Notes: Indirect age-standardization using 2001 census population of England & Wales by sex and 5 year age-group as standard.. All people resident in England and Wales in 2001 = 100. Bold indicates statistically significantly different from the standard England and Wales population.

Country of birth information has also been used more recently to produce SMRs for Scotland by Fischbacher et al. (2005), who argue that though country of birth provides only a partial solution to the lack of ethnicity data, analyses by country of birth can provide some useful insights. Fischbacher et al. (2005) calculated SMRs with 95% confidence intervals for Scottish residents 25 years and over for a 6.25 year period using routine mortality statistics and adjusted census denominators. They used both an indirect standardization method taking (i) the England & Wales population, and (ii) the Scottish population as the comparator (which permits comparisons between each country of birth group and the England & Wales rates but not between the country of birth groups), as well as direct standardisation to allow direct comparisons between the different countries of birth groups (though this was compromised by small numbers in some groups). We reproduce below the SMRs that were calculated using the indirect standardization against the population of Scotland (Table 7). The results suggest that in comparison with the general Scottish population, none of the migrant groups had elevated mortality levels among either men or women. Indeed, most of the country of birth groups had lower mortality levels than the standard Scottish population, including all the South Asian born groups among men.

Table 7: SMRs among Scottish residents (aged 25-69 years) from all causes for 6.25 years (Jan 1997-Mar 2003) by country of birth and sex, using death rates from Scottish born in Scotland as reference.

Country of birth	Males		Females	
	No. of deaths	SMR	No. of deaths	SMR
England & Wales	480417	**72.0**	304571	**75.9**
UK (other)	3888	**64.9**	2415	**69.8**
N. Ireland	365	**85.2**	216	**80.5**
R/Ireland	426	106.4	253	**81.5**
India	173	**72.2**	107	94.5
Pakistan	121	**65.4**	78	87.5
Bangladesh	6	**36.3**	3	72.1
China	26	71.9	12	**55.0**
Hong Kong	62	**66.0**	25	**58.3**
Rest of the world	884	**76.4**	553	**70.7**

Source: (Fischbacher, et al. 2005)
Notes: Bold denotes significantly different from standard population

A further approach has recently been developed which involves the *indirect* estimation of mortality using an empirical relationship between reported long-term limiting illness and mortality for local areas to derive ethnic group SMRs from ethnic group Standardized Illness Ratios (SIRs) derived from the 2001 Census. Readers should refer to Rees et al.'s paper for a full understanding of the steps involved (Rees, Wohland and Norman 2009). Rees et al.'s (2009) indirect estimates suggest that the Chinese group life expectancies were highest for both men and women, with both men and women in the Other White and Other Ethnic groups having life expectancies above the all group mean, and Black African men having a life expectancy slightly above the all group men. The Indian group had life expectancies close to the all group average for men but well below average life expectancies for women. The lowest life expectancies were among the Bangladeshi group, the Pakistani group, the Other Black group and the White and Black Caribbean group. The mixed groups, White and Black African and White and Asian as well as the White Irish, Black Caribbean and Other Mixed groups, all had life expectancy below the all group mean, though the difference was not large (Table 8). It is important to emphasise that these indirect estimates are based upon self-reported limiting long-term ill-health/disability, a measure that may well be sensitive to cultural (linked to ethnicity and/or gender) variation in the experience and expression of ill-health.

Table 8: Indirect estimates of Life expectancy at birth (e_0) for ethnic groups, men and women, England, 2001, calculated with the Standardized Illness Ratio method

Ethnic group	Women e_0	Men e_0
White British	80.5	75.9
White Irish	80.3	74.9
Other White	81.3	76.9
Indian	79.3	75.5
Bangladeshi	77.7	72.7
Pakistani	77.3	73.1
Other Asian	79.5	75.2
Black Caribbean	79.1	74.4
Black African	80.4	76.1
Other Black	78.5	73.4
Chinese	82.1	78.1
White-Asian	80.0	75.1
White-Black Caribbean	78.7	73.4
White-Black African	79.5	74.2
Other Mixed	79.9	74.6
Other Ethnic	81.5	76.2
All groups	80.5	76.0

Source: Rees et al. (2009)
Notes: Readers should refer to Rees et al.'s paper for a full description of the method employed.

It has been confirmed by the authors of this paper that indirect estimates of life expectancy at other ages (age 20, 65 and 80, as reported in other chapters in this report) could also be produced from these linked datasets but these were not available at the time of publication.

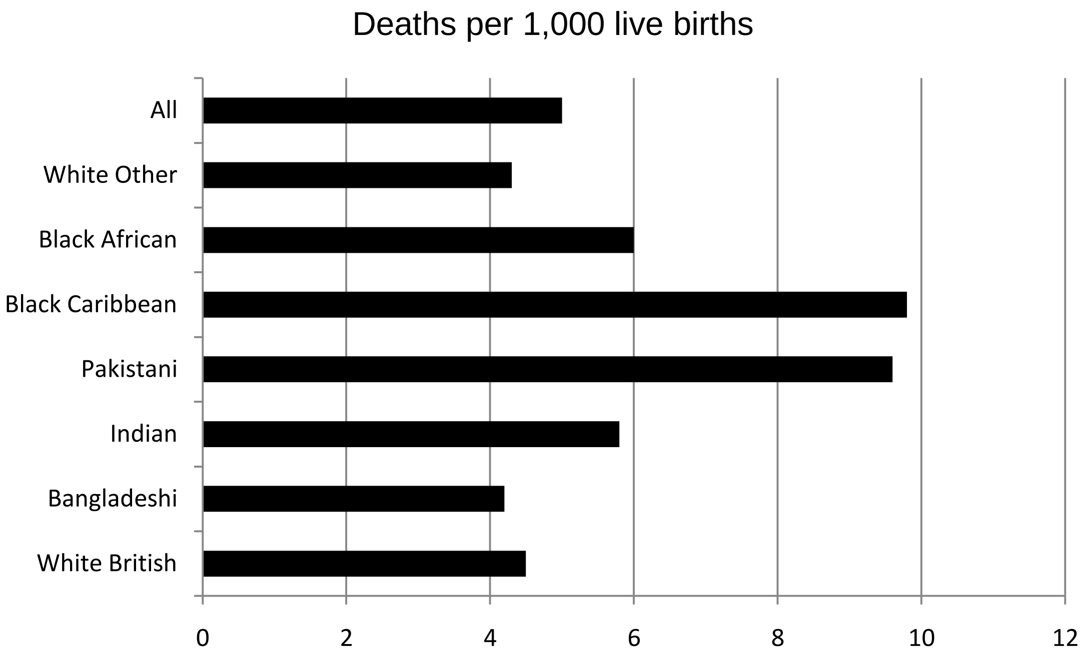
No life expectancy estimates are currently available for Gypsy and Traveller populations or for asylum seekers and refugees.

Infant mortality

Until recently it has not been possible to publish infant mortality rates (IMRs) by ethnic group in Britain as birth statistics routinely produced by Office for National Statistics (ONS) are based on information collected at birth registration and ethnic group is not recorded at birth registration. The introduction of NHS numbers for babies (NN4B) born in England, Wales and Isle of Man, which includes ethnic group information, has enabled record linkage to death certificates to enable IMR to be estimated by ethnic group for the first time for all births in England & Wales 2005.

Figure 1 illustrates large differences between the ethnic groups, with White British and Bangladeshi babies being least likely to die before age one (estimated rates of 4.5 and 4.2 per 1,000 live births) and Pakistani and Black Caribbean babies being most likely to die (estimated rates of 9.6 and 9.8 deaths per 1,000 live births). It is worth noting that all minority ethnic groups are found to have lower birth weights than the majority White British population (Moser et al. 2008). Furthermore, the predominant cause of infant deaths differed between the two groups with highest IMRs in 2005. While Pakistani babies were most likely to die from congenital abnormalities (accounting for 116 out of the total 231 deaths occurring), among Black Caribbean babies the most prevalent cause of death was 'immaturity related conditions' (accounting for 49 out of the 73 deaths occurring).

Figure 1: Infant mortality rates (IMR) by ethnic group: babies born in England & Wales, 2005



Source: ONS, http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15111
Notes: There were 3,200 infant deaths in total with the number of deaths to babies in each ethnic groups being: Bangladeshi (34), Indian (93), Pakistani (231), Black Caribbean (73), Black African (118), White Other (142) and White British (1,859). IMR for Chinese was not computed separately due to small numbers.

There are no estimates of infant mortality for Gypsy and Traveller populations or for asylum seekers/refugees. The study by Parry et al. (2007) described above in the section on Data Quality and Quantity attempted to capture some relevant information by asking respondents “Are all your children still living?” They report that *'25 of 142 Gypsy Traveller women (17.6%) had suffered the death of a child (of any age but excluding miscarriages) compared with one of 110 matched comparators (0.9%) (*χ^2*=16.9, p<0.001).... Eight Gypsy Travellers but no comparators reported one or more stillbirths or death of a neonatal infant, with one woman experiencing multiple stillbirths'* (pg 41).

Maternal mortality

While in general deaths related to pregnancy and childbirth are uncommon in Britain, there are concerns that women of minority ethnic background, and particularly Black African women who are newly arrived in the country, experience significantly higher risks of such death. The Confidential Enquiry into Maternal and Child Health (CEMACH) (Lewis 2004), which reported on maternal deaths between 2000 and 2002, reported that women from ethnic minority groups were, on average, three times more likely to die as a result of a direct or indirect maternal death, and that for Black African women (including asylum seekers and newly arrived refugees) the mortality rate was seven times higher than White women. The more recent CEMACH report (Lewis 2007)) which reported on data from 2003-5, also found significantly elevated maternal mortality rates among Black African women (62.4 deaths per 100,000 maternities, CI 43.7-89.0; 30 deaths in total); Black Caribbean women (41.1 deaths per 100,000 maternities, CI 21.6-78.1; 9 deaths in total and); and Middle Eastern women (32.0 deaths per 100,000 maternities, CI 5.5-66.1; 7 deaths in total), when compared to White women (11.1 deaths per 1000,00, CI 9.5-12.9). These enquiries have identified major problems in accessing maternal healthcare for these women and significant communication barriers, particularly for new migrants.

Cause specific mortality

There are no direct estimates of cause-specific mortality rates by ethnicity for England, Scotland or Wales since ethnicity is not recorded at death registration. However, the country of birth analyses described above do offer some insights into the causes of death experienced by migrant minority populations. In addition, we present some data that are available on morbidity patterns for the major killers identified in the EMF by ethnicity.

It is important to note that the major killers are common across most ethnic groups and both sexes (though some differences do emerge). Therefore, comparisons between minority ethnic groups and the White British majority - for instance using SMRs - may not indicate elevated risks among minority groups but nevertheless conceal worryingly high levels of mortality. It is important therefore to explore absolute rates as well as inequalities between groups.

Cardiovascular disease mortality

Cardiovascular mortality: country of birth analyses (around 1991)

Gill et al.'s (2002) analysis of cause-specific mortality by country of birth for England and Wales around the time of the 1991 census concluded that for those born in

India, circulatory diseases, and specifically ischaemic heart disease (IHD), were the dominant causes of death in men (Table 9). The SMRs produced supported earlier findings that suggest these diseases to be 30–50% more common in migrant Indians compared to the population as a whole. Indian men had higher mortality rates from circulatory disease than Indian-born women. Among those born in Pakistan and Bangladesh too, cardiovascular diseases dominated for men, and to a lesser extent for Pakistan-born women. For those born in the Caribbean, both men and women, IHD, as well as cerebrovascular disease, were again the dominant causes of death. For those born in West and South Africa, SMRs were elevated for hypertension and cerebrovascular disease in men and for cerebrovascular disease in women, but ischaemic heart disease mortality was lower for both men and women in this group. The China-born men and women had much lower mortality from circulatory disease than the general population, but these diseases were still the second most common cause of death.

Table 9**:** Cause-specific SMRs for cardiovascular disease by country of birth, England and Wales, 1989-92

Country of birth	Males		Females	
	IHD	Cerebro-vascular	IHD	Cerebro-vascular
India	**142** [668]	**134** [120]	**158** [261]	**146** [103]
Pakistan	**148** [229]	**149** [42]	111 [38]	**159** [24]
Bangladesh	**151** [93]	**281** [29]	91 [7]	151 [6]
Hong Kong/China/Taiwan	**44** [27]	129 [14]	**43** [9]	135 [12]
Caribbean	**62** [210]	205 [126]	**86** [83]	**197** [76]
West and South Africa	**58** [25]	**261** [20]	**61** [5]	**162** [9]

Source: (Gill, et al. 2002)
Notes:. Average number of deaths per year in []. All people resident in England and Wales = 100. Bold indicates statistically significantly different from the standard England and Wales population.

Maxwell and Harding's (1998) results are presented in Table 10 below using slightly different country of birth groupings. The broad patterns are consistent with Gill et al.'s (2002) analysis above.

Table 10: Cause-specific standardised mortality ratios (SMR) for ischaemic heart disease by country or region of birth and sex, 20–64 years, England and Wales 1991–93

Country of birth	Males		Females	
	IHD	Cerebro-vascular	IHD	Cerebro-vascular
Caribbean	**60** [369]	**169** [160]	100 [146]	**178** [115]
Indian sub-continent	**150** [1,736]	**163** [299]	**175** [423]	**132** [151]
Scotland	**117** [1,253]	111 [189]	**127** [324]	**131** [150]
Ireland	**121** [1,706]	**130** [288]	**129** [521]	**118** [202]

Source: (Maxwell and Harding 1998)
Notes: Numbers of deaths in []. All people resident in England and Wales = 100. Bold indicates statistically significantly different from the standard England and Wales population.

Cardiovascular mortality: country of birth analyses (around 2001)

Fischbacher et al. (2007) computed SMRs for IHD mortality by country of birth for Scotland for deaths 1997-2003. When using the Scottish born population of Scotland as the reference, the SMRs for women and men born in India, Pakistan or Bangladesh were not significantly elevated, suggesting that in Scotland these South Asian minority ethnic groups do not have an excess risk of IHD mortality when compared to the Scottish born population. However, it is important to note that when the population of England & Wales was taken as the reference, SMRs were elevated among both men and women for those born in Scotland, Northern Ireland, India, and particularly Pakistan, illustrating the generally higher IHD mortality rates experienced among much of the Scottish resident population. (Numbers of deaths were too small for robust estimates for those born in Bangladesh or China).

Wild et al. (2007) examined circulatory disease mortality for people aged 20 years and over in England & Wales by country of birth using population data from the 2001 Census and mortality data for 2001–2003. Indirect standardization was used to estimate sex-specific SMRs and 95% confidence intervals (CI) in comparison to mortality for England and Wales as a whole. As shown in Table 11 below, high IHD SMRs were observed among men and women aged ≥20 years born in Ireland, East Africa, Bangladesh, Pakistan or India, men born in Eastern Europe or the Middle East and women born in Scotland. Low SMRs for IHD were observed among men born in West Africa or the West Indies and both men and women born in China or Hong Kong. In young adults (20–44 years of age), very high mortality from IHD was seen for men born in Eastern Europe (SMR 235; 95% CI 151–350) and in Pakistan (SMR 261; 95% CI 203–330). SMRs for IHD for men born in Eastern Europe or Pakistan were also elevated in other age groups but the difference from the standard was less marked at older ages. In relation to mortality from cerebrovascular disease, the picture was somewhat different. Cerebrovascular disease mortality was statistically significantly elevated among men born in all the countries analysed apart from the Middle East. SMRs were also significantly higher than the standard among women born in Ireland, Scotland, West Africa, Bangladesh, India, Pakistan and the West Indies. Particularly high SMRs for cerebrovascular disease were seen for men and women born in Bangladesh and for men born in West Africa.

Table 11: Numbers of deaths and cerebrovascular disease (ICD–10 I60–I69) and IHD (ICD–10 I20–I25) SMRs by sex and country of birth for people aged 20 years and over

Country of birth	Men		Women	
	IHD	Cerebrovascular	IHD	Cerebrovascular
Scotland	104 [3,813]	**113** [1,587]	**107** [2,767]	**107** [2,104]
Ireland	**118** ([4,531]	**127** [1,825]	**108** [3,298]	**111** [2,512]
Eastern Europe	**111** [1,981]	**112** [886]	104 [711]	100 [525]
East Africa	**141** [521]	**124** [126]	**130** [177]	112[102]
North Africa	97 [163]	**131** [75]	111[120]	112 [88]
West Africa	**61** [132]	**234** [144]	81[61]	**131** [70]
West Indies	**73** [897]	**160** [652]	96 [547]	**137** [515]
Middle East	**115** [592]	96 [168]	105 [247]	98 [162]
Bangladesh	**175**[409]	**249** [169]	**167** [97]	**207** [79]
India	**131** [2,528]	**116** [796]	**149** [1,672]	**122** [997]
Pakistan	**162**[1,044]	**141** [294]	**174** [454]	**139** [254]
China and Hong Kong	**66** [172]	**125** [113]	**67** [110]	114 [140]

Source: (Wild et al. 2007)
Notes: Indirect age-standardization using 2001 census population of England & Wales by sex and 5 year age-group as standard.. All people resident in England and Wales in 2001 = 100. Bold indicates statistically significantly different from the standard England and Wales population.

Cardiovascular disease: morbidity levels by ethnic group

The HSE 2004 collected data intended to indicate the prevalence of CVD among the minority ethnic groups of England. Informants were classified as having a cardiovascular (CVD) condition if they reported having ever had any of the following conditions diagnosed by a doctor: angina, heart attack, stroke, heart murmur, abnormal heart rhythm and/or ‘other heart trouble’. Reported cardiovascular disorder diagnosed by a doctor was most found to be prevalent among Irish men (14.5%) and among women in the general population (13.0%). Black African men and Chinese women were significantly less likely than the general population to have any CVD condition. The prevalence of any CVD condition increased markedly with age in all ethnic groups. However, when the analysis is broken down by age-group, Pakistani men and women in the 55+ age-group have the highest levels of CVD.

Cardiovascular disease incidence and mortality: trends over time

There are claims in recent government policy documents and British Heart Foundation literature (Department of Health 2004) that, while coronary heart disease mortality is falling in the general population in England & Wales, the rate of decline is slower among South Asian populations than other groups. However, this claim can not be confirmed with certainty with the data that are available. Nevertheless, Harding et al. (2008) have performed a useful analysis using the available country of birth data in which they computed age-standardized and sex-specific IHD and cerebrovascular disease mortality rates and also SMRs for people aged 30-69 years and born in various countries when compared to those born in England & Wales for the time periods 1979-83, 1989-93 and 1999-2003. These analyses showed that IHD mortality fell over the period among migrants, particularly in the second decade. Rate ratios for IHD mortality remained significantly higher than the England & Wales-born standard among men and women born in Scotland, Northern Ireland, Republic of Ireland, India, Pakistan and Bangladesh, and lower for men from Jamaica (identified separately in these analyses), other Caribbean, West Africa (which will include so-called 'twice migrant' Indian-Africans), Italy and Spain. As a result of smaller declines in mortality rates than among those born in England & Wales, SMRs increased for men from Pakistan (1979-83: 114, 1999-2003: 193), Bangladesh (1979-83: 136; 1999-2003: 211), Republic of Ireland (1979-1983: 118; 1999-2003:145) and Poland (1979-83:117; 1999-2003: 197) and for women from Jamaica (1979-83: 63; 1999-2003: 123) and Pakistan (1979-83: 114; 1999-2003: 245,). As a result of smaller declines than the England & Wales-born reference population, SMRs for cerebrovascular mortality also increased among some migrant groups including: men born in Pakistan (1979-1983: 99; 1999-2003: 158), Scotland (1979-1983: 111; 1999-2003: 130) and Republic of Ireland (1979-1983: 127; 1999-2003: 167).

It is clearly important to remember that (i) we do not have data on cause of death by ethnicity, and that (ii) latest estimates of cause of death data by country of birth provide a poor proxy for ethnicity, and relate to the 2001 period. In 2001, the proportion of people who were born in the UK among the largest ethnic groups were: Irish 34%, Indian 46%, Pakistani 55%, Bangladeshi 46%, Black Caribbean 58%, Black African 34% and Chinese 29% (ONS, online statistics available at http://www.statistics.gov.uk/statbase/product.asp?vlnk=14629). As such the mortality figures produced for most migrant minority groups, including the South Asian populations, are imprecise estimates for the total (migrant and non-migrant) ethnic minority populations and may over- or under-estimate the excess risk in comparison with the White British majority (Bhopal 2000). It is not possible therefore to confidently assess trends over time in heart disease mortality, or any specific cause of mortality, by ethnicity at the present time. It is also important to highlight the significant variation in morbidity and mortality profiles that exist between the ethnic groups that are sometimes lumped together into the broad 'South Asian' category. Various analyses have shown that the elevated risk of coronary heart disease is confined to the Pakistani and Bangladeshi ethnic groups, with Indians having much lower risks (Bhopal 2000; Bhopal et al. 1999; Nazroo 2001).

Limited trend data on cardiovascular disease prevalence are available from the HSE 1999 and 2004. A comparison of data from these two surveys suggests that the prevalence of CVD (all circulatory diseases combined) increased over this period among Pakistani men from 4.8% in 1999 to 9.1% in 2004 and among Indian women, from 2.3% to 4.2%. No evidence of such increases was found for other sub-groups.

Cancer mortality rates

In common with cardiovascular disease mortality discussed above, there is some evidence on cancer mortality rates for migrant minority groups from the country of birth analyses that have been performed around the time of the 1991 and 2001 censuses.

We report here findings from Wild et al. (2006) since these are the most up-to-date findings (Table 12). Wild et al. (2006) used population data from the 2001 Census and mortality data for 2001-2003 to estimate standardised mortality ratios for all cancers combined and major cancers among men and women aged 20 years by country of birth taking the whole of England and Wales as the reference group.

Statistically significantly higher mortality from all cancers combined, lung and colorectal cancer was found among people born in Scotland and Ireland. Lower mortality for all cancers combined, breast and prostate cancer was found among people born in Bangladesh (except for lung cancer in men), India, Pakistan and China/Hong Kong. Lower lung cancer mortality was found among people born in West Africa and the West Indies, while higher breast cancer mortality was seen among women born in West Africa (SMR 132, CI 105-163) and higher prostate cancer mortality among men born in West Africa (SMR 271, CI 207-349) and the West Indies (SMR 198, CI 178-221).

It is important to note that although the SMRs indicated mortality levels below those of the general population for many of the migrant groups, cancers are nevertheless a leading cause of death for all migrant-minority groups.

Table 12: All cancer and lung cancer SMRs by sex and country of birth for people 20+ years of age, England and Wales, 2001-2003

Country of birth	Men		Women	
	All cancers	Lung	All cancers	Lung
Scotland	**115** [5,271]	**132** [1,506]	112 [4,372]	**147** [1,026]
Ireland	**125** [6,110]	**149** [1,848]	**110** [5,130]	**136** [1,167]
Eastern Europe	95 [1,979]	98 [497]	**93** [878]	**70** [118]
East Africa	**75** [384]	**48** [61]	**84** [361]	**31**[22]
North Africa	93 [206]	79 [43]	107[197]	79 [26]
West Africa	115[352]	**68** [50]	109 [280]	**40** [16]
Middle East	100 [685]	87[148]	93 [447]	**35** [30]
Bangladesh	**85**[283]	116 [99]	**65** [117]	**36** [11]
India	**58**[1,440]	**44**[279]	**72** [1,410]	**45**[158]
Pakistan	**60** [526]	**58** [128]	**69** [414]	**31** [32]
West Indies	103 [1,679]	**81**[348]	**82** [996]	**22** [51]
China and Hong Kong	**84** [287]	**74** [63]	**81** [240]	**67** [34]

Source: (Wild et al. 2006)
Notes: Indirect age-standardization using 2001 census population of England & Wales by sex and 5 year age-group as standard. Numbers of deaths in [], All people resident in England and Wales in 2001 = 100. Bold indicates statistically significantly different from the standard England and Wales population.

SMRs for women for breast cancer and for men for prostate cancer, as well as for colorectal cancer for both sexes, were also calculated (Wild et al., 2006). For breast cancer, the statistically significant findings were an elevated risk among women born in West Africa (SMR 132) and a reduced risk among women born in Eastern Europe (SMR 81), Bangladesh (SMR 27), India (SMR 79) and Pakistan (SMR 73). For prostate cancer, men born in Eastern Europe (SMR 76), Middle East (SMR 75), Bangladesh (SMR 21), India (SMR 64), Pakistan (SMR 72) and China or Hong Kong (SMR 55) all had a lower risk than the England & Wales standard. In contrast, men born in West Africa (SMR 271) and the West Indies (SMR 198) had a statistically significantly higher risk. Risks of colorectal cancer were lower among men and women born in India and Pakistan, and men born in East Africa or the Middle East. Higher risks were found for men and women born in Scotland and for men born in Ireland. For all other groups there was no evidence of significantly different risks compared to the standard.

Cancer incidence data:

The National Cancer Intelligence Network provides information on incidence data for 18 specific sites of cancer and produces disaggregated data for broad ethnic groups categorised as 'White', 'South Asian', 'Chinese', 'Mixed' and 'Black'. Drawing on the report of cases diagnosed from 2002-2006 in England (and bearing in mind that 25% of cases could not be assigned to an ethnic category), the overall, cancer incidence was found to be lower in South Asian, Chinese and mixed groups than Whites. However, some important specific differences were also identified (National Cancer Intelligence Network 2009):

- Black males of all ages were more likely to have a diagnosis of prostate cancer than White males (Age standardised Relative Risk (RR) between 1.26 and 2.48, based on different assumptions regarding patients with unknown ethnicity)
- Black males and Black females had higher rates of cancers of the stomach than their White comparators (RR 1.14 – 1.74)
- Black males and Black females had a higher rate of liver cancer than their White comparators (RR 1.47 – 2.67)
- Black males and Black females had a higher rate of myeloma than their White comparators (RR 1.79 – 2.80)
- Black females aged 65 and over were at a higher risk of cervical cancer than White females of the same age (RR 1.13 - 2.50)
- South Asian females aged 65 and over had a higher risk of cervical cancer than White females (RR 1.15 - 2.29)
- South Asian men and women had a higher rate of liver cancer than their White comparators (RR 1.47 – 2.43)
- South Asian females 65 and over had an increased risk of cancer of the mouth (RR 1.18 – 1.97), whereas South Asian men may have a lower risk of getting cancer of the mouth than White males.

These incidence data are consistent with the country of birth mortality data in suggesting increased risks of prostate cancer for Black Caribbean and Black African men. However, they also suggest that other cancers are more prevalent among

Black men and women, suggesting that there may be increased risks among British-born minorities.

Suicide and accidental death

No recent estimates of mortality by suicide or accidental death by country of birth could be found. Maxwell and Harding's (1998) analysis is now rather old, being as based on deaths around the time of the 1991 census. In the absence of any other information, we reproduce their figures for SMRs by country of birth below. Compared to the standard England and Wales population, men born in the Caribbean and in the Indian sub-continent had lower suicide mortality, as did women born in the Caribbean. However suicide mortality was statistically significantly elevated among men and women born in Scotland and Ireland. Looking at accidental deaths, men born in the Indian sub-continent had a lower risk compared to the standard, but again mortality was significantly elevated for both men and women born in Scotland or in Ireland (Table 13).

Table 13: Suicide and accidental injury standardised mortality ratios (SMR) by country or region of birth and sex, 20–64 years, England and Wales 1991–93

Country of birth	Males		Females	
	Suicide	Accident	Suicide	Accident
Caribbean	**59**	121	**49**	103
	[38]	[83]	[12]	[29]
Indian sub-continent	**73**	**80**	115	**93**
	[146]	[172]	[66]	[63]
Scotland	**149**	**177**	**153**	**201**
	[284]	[363]	[78]	[122]
Ireland	**135**	**189**	**144**	**160**
	[244]	[371]	[87]	[117]

Source: (Maxwell and Harding 1998)

Notes: 95% confidence intervals given in (), numbers of deaths in []. All people resident in England and Wales 1991 = 100. * indicates statistically significantly different from the standard England and Wales population. Suicides include deaths of undetermined event.

Bhui et al. (2008) have conducted an analysis of data from the National Confidential Inquiry which receives data on all potential suicides from the ONS, and investigates suicides within 12 months of contact with mental health services in England and Wales. They calculated suicide rates using data from the NCI as the numerator and data from the 1991 and 2001 national census as the denominator. The denominators for the years 1996 to 2001 were estimated from ethnic-specific age, sex, and age-by-sex population projections. The rates and standardized mortality ratios (SMRs) of suicide *following contact with mental health services* were calculated for four ethnic groups in England and Wales: Black Caribbean, Black African, South Asian (Indian, Pakistani, and Bangladeshi), and white and, unusually, ethnicity was clinician-assigned. The study also investigated whether clinical indices of risk show ethnic variations. Overall, compared with the SMRs for their white counterparts, low SMRs were found for South-Asian men and women (SMR 50 for men and SMR 70 for women). Overall SMRs did not differ significantly from the White group for Black Caribbeans or Black Africans. However, high SMRs were found for Black Caribbean and Black African men aged 13–24 (SMR 290 for Black Caribbean men and SMR 250 for Black African men). High SMRs were also found for young women aged 25–39 of South-Asian origin (SMR 280), Black Caribbean origin (SMR 270), and Black African origin (SMR 320).

HEALTH: outcome indicators

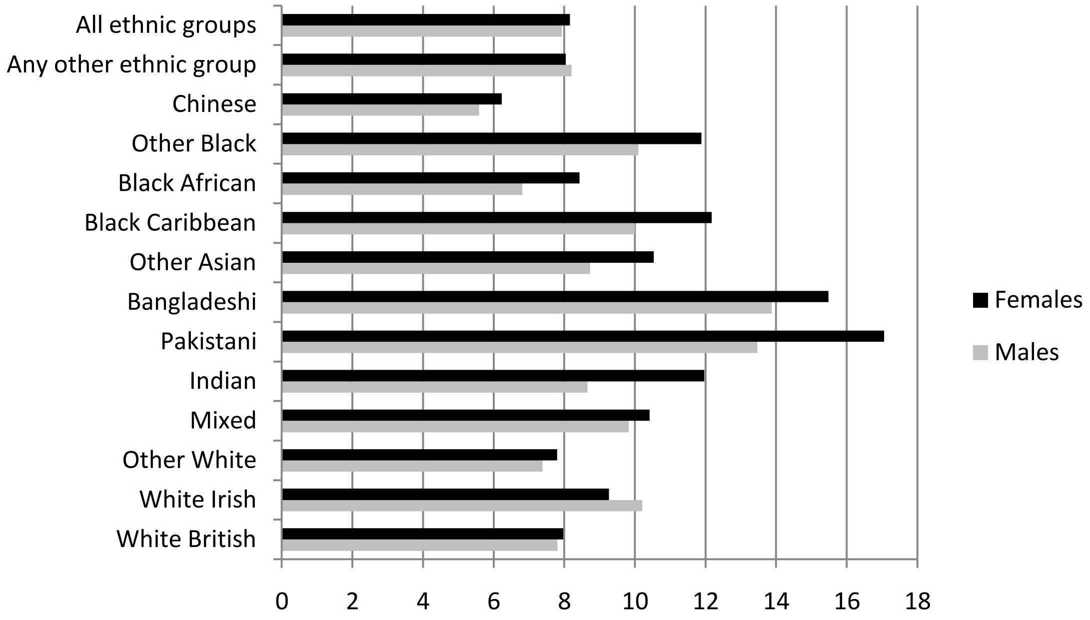
Self-reported general health

Proportion of people reporting 'poor' or 'not good' health: current picture

Though now somewhat out-of-date, the 2001 census provides the most robust estimates of self-reported health by ethnicity for the countries of Great Britain. Figures are available for Scotland and for England and Wales combined. Figures disaggregated for England and Wales separately are not currently available from ONS and would require a specific data request.

Figure 2 shows the age-standardised percentages of people reporting 'not good' health for England and Wales combined from the 2001 censuses by sex and ethnic group. Among both males and females the Bangladeshi and Pakistani groups stand out as having by far the highest levels; over 13% for males and over 15% for females, and the Chinese group is noticeable for its low level among both sexes, around 6%.

Figure 2: Age standardised percentages of people reporting 'not good health': by ethnic group and sex (all ages), England & Wales, April 2001



Source: Census, April 2001, ONS.
Notes: Differences between males and females were significant for White British, White Irish, Indian, Pakistani, Other Asian, Black Caribbean and Black African groups. Directly age-standardized against the European Standard Population.

ONS report that, among males, differences between the White British group and the other ethnic groups were statistically significant in all cases except the 'Any other' and the 'Other white' groups. While the levels of reported 'not good health' were significantly lower among Chinese and Black African males, in all other minority ethnic groups more males reported 'not good' health than among White British males. Among females, the age-standardised percentage among the Chinese category was significantly lower than the White British, while in all other groups the percentage was significantly higher, except the 'Any other' and Black African where there was no significant difference.

It should be remembered that smaller ethnic groups that remain un-enumerated or hidden within larger categories, such as Somalis within the broad Black African group, may experience even worse health than Bangladeshi and Pakistani groups.

Age-specific rates of reporting 'not good health' by sex and ethnic group have been computed from the raw Census figures supplied by ONS and are presented in Table 14 below. Patterns by age-group are somewhat more complex than the aggregate figures suggest, though Pakistani and Bangladeshi men and women stand out as being most likely to report not good health at most ages and Chinese men and women being least likely at most ages. However, among younger men, it is the Irish who are most likely to report not good health, and the disadvantaged position of the Bangladeshi and Pakistani groups worsens with increasing age-group among both sexes. Among the Indian group, while in the younger age-group both men and women are no more likely to report not good health than the White British and several other groups, the proportion reporting not good health increases steeply with age, as it does for the Black Caribbean group. Among the Mixed groups, the White and Asian group appears to have better self-reported health than the White and Black Caribbean and the White and Black African groups among both males and females.

Table 14: Percentage of people reporting 'not good health' by sex, age-group and ethnic group, England & Wales 2001

		White:			**Asian or Asian British:**				**Black or Black British:**		
		British	**Irish**	**Other White**	**Indian**	**Pakistani**	**Bangladeshi**	**Other Asian**	**Caribbean**	**African**	**Other Black**
Men	16-49	5.2	7.5	4.1	4.3	6.9	6.3	5.3	5.6	3.7	6.4
	N	*10,237,521*	*132,201*	*387,345*	*294,132*	*191,230*	*72,507*	*79,708*	*139,603*	*136,769*	*23,298*
	50-64	15.2	21.8	13.6	18.3	28.9	34.0	16.7	21.4	12.0	19.8
	N	*4,125,581*	*83,354*	*82,965*	*65,910*	*26,856*	*8,303*	*16,641*	*33,485*	*15,576*	*2,323*
	65+	21.9	25.1	23.5	25.7	34.9	37.7	24.3	30.7	22.0	26.4
	N	*3,246,944*	*67,662*	*61,436*	*34,077*	*16,555*	*6,010*	*6,567*	*30,679*	*5,795*	*1,502*
women	16-49	5.9	7.1	4.4	5.9	9.0	7.9	6.5	7.7	4.7	8.4
	N	*10,299,484*	*137,730*	*448,789*	*303,447*	*190,886*	*73,372*	*62,074*	*173,797*	*154,515*	*28,519*
	50-64	14.1	18.2	13.5	25.2	36.1	32.9	19.6	24.0	16.5	23.0
	N	*4,187,100*	*90,461*	*100,892*	*67,421*	*25,859*	*9,635*	*13,650*	*42,287*	*16,933*	*2,437*
	65+	24.5	25.0	26.6	38.2	43.8	36.0	31.1	36.7	25.3	28.8
	N	*4,533,921*	*92,600*	*78,719*	*34,493*	*13,374*	*3,058*	*5,926*	*29,183*	*5,337*	*1,551*

		Mixed:				**Chinese or Other Ethnic Group:**	
		White and Black Caribbean	**White and Black African**	**White and Asian**	**Other Mixed**	**Chinese**	**Other Ethnic Group**
Men	16-49	6.3	6.4	5.6	6.2	2.1	4.6
	N	*41,209*	*18,074*	*41,067*	*33,690*	*70,862*	*63,202*
	50-64	22.5	21.2	17.2	18.9	10.3	14.2
	N	*3,126*	*1,734*	*5,041*	*4,628*	*11,672*	*9,969*
	65+	25.7	25.8	18.1	23.4	19.7	24.3
	N	*2,696*	*794*	*3,028*	*2,288*	*5,414*	*2,756*
Women	16-49	7.2	7.1	6.5	6.7	3.0	4.3
	N	*47,408*	*19,565*	*41,070*	*38,396*	*77,509*	*83,357*
	50-64	22.7	21.3	17.9	19.4	10.3	13.7
	N	*3,439*	*1,881*	*5,375*	*5,360*	*13,681*	*14,495*
	65+	27.9	23.7	21.9	25.3	23.7	27.4
	N	*2,907*	*978*	*3,620*	*3,057*	*6,221*	*3,626*

Source: Computed from raw figures provided by ONS at http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D7547.xls

Notes: General health refers to health over the 12 months prior to census day. Ethnic group categories and age-groups are those supplied by ONS.

The 2001 census of Scotland also provides information on self-reported health by ethnicity. Table 15 below gives the percentage of people reporting their health as 'not good' by sex, age-group and ethnic group. Numbers are small in several of the cells, particularly at the older age-groups, making it difficult to compute robust estimates. Bangladeshi and Pakistani people again stand out as reporting not good health in high numbers and Chinese as being less likely to rate their health as not good than other ethnic groups. Over age 60 years, a high proportion of Indian and Pakistani men, and particularly women, report their health to be 'not good'. Among the White groups, the Irish and Scottish are more likely to report 'not good' health than the other White British and Other White groups at almost all ages.

Table 15: Percentage of people reporting their health to be 'not good' by age-group, sex and ethnic group, Scotland, 2001

	White Scottish	**Other White British**	**White Irish**	**Other White**	**Indian**	**Pakist-ani**	**Bangla-deshi**	**Other South Asian**	**Chinese**	**Caribb-ean**	**African**	**Black Scottish or other Black**	**Any Mixed Back-ground**
Men													
16-24	2.7	2.2	2.7	2.2	2.2	2.9	3.5	2.0	1.5	2.4	5.5	4.8	3.3
N	*244,332*	*21,745*	*2,813*	*6,320*	*1,487*	*2,873*	*199*	*588*	*1,836*	*126*	*437*	*83*	*1,227*
25-34	5.4	3.6	5.4	3.4	3.6	5.3	3.7	6.7	1.9	3.4	4.1	7.4	9.3
N	*287,486*	*29,515*	*3,877*	*8,059*	*1,729*	*2,885*	*216*	*616*	*1,475*	*175*	*704*	*94*	*825*
35-59	11.6	7.8	13.7	8.5	9.3	15.3	14.1	10.3	5.6	10.5	6.5	17.3	15.5
N	*748,344*	*77,540*	*9,409*	*11,428*	*2,268*	*3,895*	*313*	*1,136*	*2,440*	*342*	*928*	*156*	*919*
60-64	22.7	15.9	26.6	19.2	25.9	37.6	-	29.0	15.5	-	-	-	25.3
N	*110,658*	*10,040*	*1,529*	*1,080*	*278*	*537*	*25*	*62*	*226*	*25*	*43*	*10*	*75*
65 and over	22.2	19.5	28.4	26.8	28.0	35.1	-	25.2	18.8	25.0	-	-	19.3
N	*290,321*	*24,937*	*4,342*	*3,723*	*425*	*609*	*39*	*127*	*357*	*68*	*39*	*44*	*249*
Women													
16-24	3.4	2.9	2.3	2.3	1.6	3.2	6.7	2.4	1.6	6.1	2.3	3.4	4.4
N	*239,356*	*22,711*	*3,008*	*7,299*	*1,294*	*2,978*	*163*	*459*	*1,731*	*132*	*432*	*87*	*1,296*
25-34	6.3	4.7	3.9	3.6	4.7	8.2	4.8	7.6	2.2	8.6	4.5	11.5	6.8
N	*308,044*	*29,403*	*3,709*	*9,652*	*1,503*	*2,963*	*187*	*551*	*1,515*	*187*	*599*	*87*	*943*
35-59	12.5	9.3	13.6	8.9	14.5	23.0	17.3	16.1	7.2	8.3	6.9	14.2	15.1
N	*785,113*	*76,218*	*9,178*	*12,972*	*2,039*	*3,733*	*191*	*720*	*2,615*	*324*	*640*	*155*	*1,120*
60-64	17.2	12.8	20.9	13.9	31.7	45.3	-	24.5	17.4	-	-	-	17.6
N	*123,013*	*9,982*	*1,831*	*1,274*	*189*	*329*	*15*	*53*	*167*	*28*	*25*	*14*	*108*
65 and over	24.1	21.9	29.0	25.6	42.3	47.3	-	21.5	26.2	17.5	29.1	29.7	27.1
N	*432,077*	*33,451*	*6,954*	*4,933*	*352*	*499*	*24*	*158*	*424*	*57*	*55*	*64*	*354*

Source: Raw figures supplied by GRO(S), percentages computed by authors.
Notes: 1. General health refers to health over the 12 months prior to Census day (29 April 2001). 2. Ethnic group categories and age-groups are those supplied by GRO(S)

More recent data are available for England from the 2004 Health Survey for England which included a 'booster' sample of people from seven main enumerated minority ethnic groups (Sproston and Mindell 2006a). As in the other surveys in the HSE series, the general self-reported health question included five possible responses: very good, good, fair, bad and very bad. Our own analyses based on grouping the responses 'fair', 'bad' and 'very bad' together as 'not good' and standardizing these for age using the European Standard Population, estimated the following *age-standardised* proportions. Among women, the figures were Bangladeshi group 52%, Pakistani group 48%, Black Caribbean group 40%, Indian 33%, Black African 30% and Chinese 26%. Among men, a similar pattern was seen: Bangladeshi group 47%, Pakistani group 34%, Indian group 33%, Chinese 26%, Black Caribbean group 25% and Black African 24%.

The HSE 2004 report presented age-standardised risk ratios for self-reported health grouped as 'bad'/'very bad' compared to the 'general population' and these are reproduced in Table 16 below. The figures in bold indicate that among women, the Black Caribbean, Indian and Pakistani groups had significantly raised risks of reporting 'bad or very bad' health compared to the general population and the Chinese had significantly lower risk. Among men, the Indian and Pakistani groups stood out as being more likely to rate their health as 'bad or very bad' compared to the general population.

Table 16: Proportions and age-standardised risk ratios for self-reported bad or very bad general health by ethnic group, England, 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Population
Men								
%	**9**	**4**	**9**	**10**	**15**	**4**	**10**	**6**
RR	**1.37**	**0.81**	1.45	2.33	**3.77**	**0.75**	**1.41**	**1**
Women								
%	11	**7**	**8**	**15**	**14**	**3**	**5**	**7**
RR	1.90	**1.68**	1.39	3.54	**4.02**	0.55	**0.74**	**1**

Source: HSE 2004

Notes: Figures in bold indicate statistically significantly different from the general population (which was a representative sample of the population of England). Figures were standardised using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

The 2004 study by Parry and colleagues of Gypsy and Traveller health found very high levels of self-reported 'not good' health (Parry et al. 2007). Overall, around 30% of their sample reported 'not good' health, with a further 31% reporting 'fairly good' health and just 40% reporting 'good health'. These figures diverge considerably from the overall national estimates for even the worst-off, Pakistani and Bangladeshi groups. They were also significantly worse than those for a 'comparator' sample matched for age, sex and locality which included both minority ethnic and White British respondents of low socioeconomic status - the figures for this sample being 14% 'not good', 29% 'fairly good' and 57% 'good health'.

Self-reported poor health: trends over time

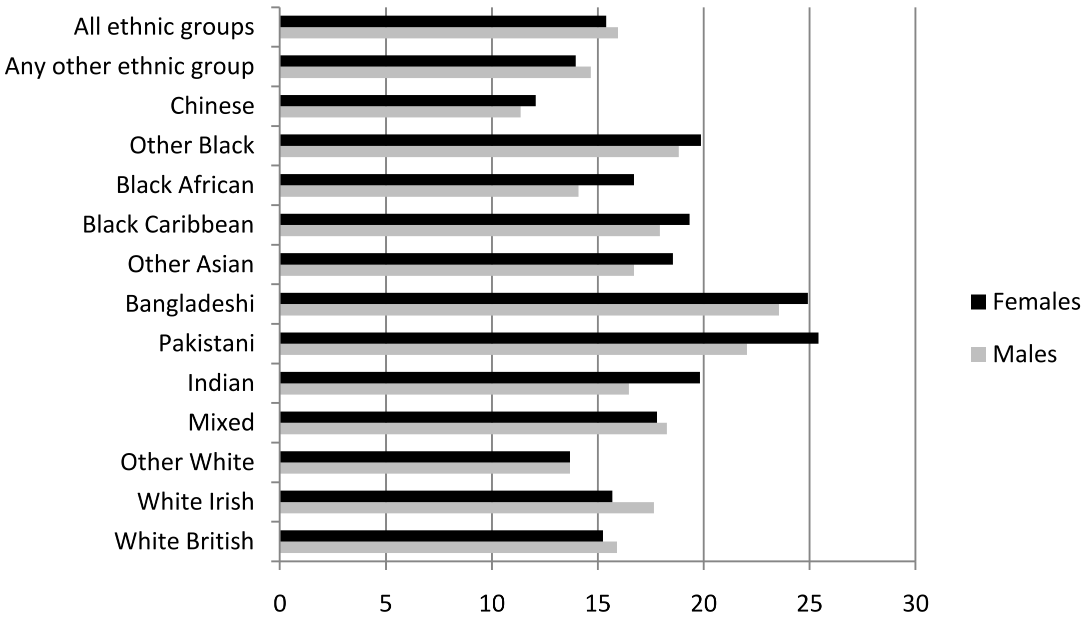
As noted above, there are very limited data on trends over time in the health of minority ethnic populations in Britain. Comparing the Health Survey for England data from 1999 and 2004, in both surveys Bangladeshi and Pakistani men and women and also Black Caribbean women, were more likely to report poor health than the general population. Chinese women were less likely to report poor health than the general population in both surveys. Comparing within each ethnic group, there was no evidence of change in the proportions reporting poor health between 1999 and 2004 for any group except for Indian women, for whom the percentage declined from 12% to 8% (Sproston and Mindell 2006b). The patterns of self reported poor health reported in the 1993-4 FNSEM were also similar, with the combined Bangladeshi-Pakistani group being most likely to report or poor health followed by the Black Caribbean group and the Chinese group being least likely (Nazroo 1997).

Self- reported limiting long-standing illness or disability

LLTI: current picture

Again, the Censuses of 2001 provide the most robust data on the minority ethnic populations of England, Wales and Scotland. Figure 3 presents age-standardised rates for people in the Censuses of England and Wales combined, by sex and ethnic group. People of Pakistani and Bangladeshi origin stand out as reporting the heaviest burden of limiting long-term ill-health/disability among both males and females. The patterns across sex are complex for the other ethnic groups, though people of Chinese origin stand out as reporting much lower levels of LLTI than other groups. Rates of reporting are also high among Indian females and females in the Other Black group.

Figure 3: Age standardised rates of LLTI by ethnic group and sex, April 2001, England & Wales (ONS, 2004)



Source: Census, April 2001, ONS. http://www.statistics.gov.uk/statbase/Product.asp?vlnk=10991
Notes: Differences between males and females were significant for White British, White Irish, Indian, Pakistani, Black Caribbean and Black African groups.

Examination of the confidence intervals shows that, among males in comparison with the White British group, the White Irish, Mixed, Indian, Pakistani, Bangladshi, Black Caribbrean and Other Black groups all had higher rates of reporting LLTI, while the Other White, Black African and Chinese had lower rates. Among women, just the Other White and Chinese groups had lower rates than the White British, with all other minority ethnic groups having higher rates.

Age-specific percentages have also been computed from the raw figures supplied by ONS for England and Wales combined and are presented in Table 17 below. The age-specific patterns are very similar to those shown above for self-reported general health. While the prevalence of LLTI increases with age across all age-groups, very high levels of LLTI are found among the over 65s among Indian, Pakistani, Bangladeshi and Caribbean groups. Over 65% of Indian and Pakistani women aged 65 years or over report an LLTI. While rates of LLTI are markedly lower among the Chinese than all other ethnic groups in the two younger age-groups (16-49 and 50-64 years), at ages over 65 their advantageous position is less apparent.

Table 17: Percentage of people reporting a long-term limiting illness or disability by sex, age-group and ethnic group, England & Wales 2001

		White:			**Asian or Asian British:**				**Black or Black British:**		
		British	**Irish**	**Other White**	**Indian**	**Pakistani**	**Bangladeshi**	**Other Asian**	**Caribbean**	**African**	**Other Black**
Men	16-49	9.9	11.8	6.9	7.7	11.2	10.8	9.2	11.1	7.2	12.1
	N	*10,237,521*	*132,201*	*387,345*	*294,132*	*191,230*	*72,507*	*79,708*	*139,603*	*136,769*	*23,298*
	50-64	26.6	33.6	22.7	32.0	45.5	55.7	29.4	33.4	23.8	33.3
	N	*4,125,581*	*83,354*	*82,965*	*65,910*	*26,856*	*8,303*	*16,641*	*33,485*	*15,576*	*2,323*
	65+	49.4	49.2	47.9	52.9	59.1	65.2	50.2	50.8	44.7	47.7
	N	*3,246,944*	*67,662*	*61,436*	*34,077*	*16,555*	*6,010*	*6,567*	*30,679*	*5,795*	*1,502*
Women	16-49	9.6	10.1	6.5	9.0	12.6	11.7	10.0	10.7	8.0	11.9
	N	*10,299,484*	*137,730*	*448,789*	*303,447*	*190,886*	*73,372*	*62,074*	*173,797*	*154,515*	*28,519*
	50-64	25.7	29.2	22.9	40.9	53.2	52.7	33.7	37.8	32.0	36.8
	N	*4,187,100*	*90,461*	*100,892*	*67,421*	*25,859*	*9,635*	*13,650*	*42,287*	*16,933*	*2,437*
	65+	53.0	49.1	51.4	65.1	66.5	59.4	59.2	59.2	52.8	54.5
	N	*4,533,921*	*92,600*	*78,719*	*34,493*	*13,374*	*3,058*	*5,926*	*29,183*	*5,337*	*1,551*

		Mixed:				**Chinese or Other Ethnic Group:**	
		White and Black Caribbean	**White and Black African**	**White and Asian**	**Other Mixed**	**Chinese**	**Other Ethnic Group**
Men	16-49	12.6	11.5	9.9	10.7	3.8	7.3
	N	*41,209*	*18,074*	*41,067*	*33,690*	*70,862*	*63,202*
	50-64	33.1	32.4	29.0	32.5	19.8	24.6
	N	*3,126*	*1,734*	*5,041*	*4,628*	*11,672*	*9,969*
	65+	48.4	50.4	44.5	47.5	43.8	47.0
	N	*2,696*	*794*	*3,028*	*2,288*	*5,414*	*2,756*
Women	16-49	11.1	10.4	9.6	9.5	4.6	6.0
	N	*47,408*	*19,565*	*41,070*	*38,396*	*77,509*	*83,357*
	50-64	35.7	34.6	29.0	30.8	20.3	22.8
	N	*3,439*	*1,881*	*5,375*	*5,360*	*13,681*	*14,495*
	65+	53.1	53.2	48.5	50.3	48.5	52.0
	N	*2,907*	*978*	*3,620*	*3,057*	*6,221*	*3,626*

Source: Computed from raw figures provided by ONS at http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D7547.xls
Notes: Ethnic group categories and age-groups are those supplied by ONS.

In the Scottish census, small numbers of minority ethnic groups make analyses by age more difficult. Nevertheless, similar patterns are observed to those in England & Wales, with the Chinese having particularly low rates at younger ages, Pakistani men and women having high rates across all ages, and Indian women having high rates at older ages (see Table 18). White Scottish and White Irish have rates that are higher than the Other White British for both sexes and all ages.

Table 18: Percentage of people reporting a limiting long-term illness or disability by age-group, sex and ethnic group, Scotland, 2001 (Census 2001)

	White Scottish	Other White British	White Irish	Other White	Indian	Pakist-ani	Bangla-deshi	Other South Asian	Chinese	Caribb-ean	African	Black Scottish or other Black	Any Mixed Back-ground
Men													
16-24	6.6	5.1	5.5	4.7	4.8	7.9	6.0	4.8	3.2	7.1	5.7	10.8	7.0
N	*244,332*	*21,745*	*2,813*	*6,320*	*1,487*	*2,873*	*199*	*588*	*1,836*	*126*	*437*	*83*	*1,227*
25-34	10.1	6.9	8.5	6.3	5.0	9.4	6.5	9.3	2.6	9.1	4.3	10.6	14.3
N	*287,486*	*29,515*	*3,877*	*8,059*	*1,729*	*2,885*	*216*	*616*	*1,475*	*175*	*704*	*94*	*825*
35-59	19.3	13.9	21.1	13.9	15.3	24.6	17.6	17.4	11.1	16.7	10.3	24.4	23.1
N	*748,344*	*77,540*	*9,409*	*11,428*	*2,268*	*3,895*	*313*	*1,136*	*2,440*	*342*	*928*	*156*	*919*
60-64	43.7	33.6	47.2	35.0	38.8	62.2	20.0	53.2	38.5	44.0	37.2	70.0	52.0
N	*110,658*	*10,040*	*1,529*	*1,080*	*278*	*537*	*25*	*62*	*226*	*25*	*43*	*10*	*75*
65 and over	53.5	50.5	58.8	56.5	54.4	62.1	-	58.3	48.7	48.5	-	-	52.2
N	*290,321*	*24,937*	*4,342*	*3,723*	*425*	*609*	*39*	*127*	*357*	*68*	*39*	*44*	*249*
Women													
16-24	6.1	5.1	4.5	4.2	4.4	5.4	9.8	5.0	2.5	6.8	5.3	4.6	6.7
N	*239,356*	*22,711*	*3,008*	*7,299*	*1,294*	*2,978*	*163*	*459*	*1,731*	*132*	*432*	*87*	*1,296*
25-34	9.6	7.4	6.1	5.0	7.0	10.3	5.9	10.3	4.2	8.0	5.5	13.8	10.1
N	*308,044*	*29,403*	*3,709*	*9,652*	*1,503*	*2,963*	*187*	*551*	*1,515*	*187*	*599*	*87*	*943*
35-59	19.9	15.5	20.5	14.3	20.4	32.4	26.2	21.7	12.2	14.2	11.6	21.3	21.2
N	*785,113*	*76,218*	*9,178*	*12,972*	*2,039*	*3,733*	*191*	*720*	*2,615*	*324*	*640*	*155*	*1,120*
60-64	36.9	29.7	40.4	30.8	52.4	66.0	-	39.6	39.5	-	-	-	44.4
N	*123,013*	*9,982*	*1,831*	*1,274*	*189*	*329*	*15*	*53*	*167*	*28*	*25*	*14*	*108*
65 and over	56.2	54.5	59.0	55.8	72.7	74.5	-	52.5	57.5	47.4	52.7	60.9	59.0
N	*432,077*	*33,451*	*6,954*	*4,933*	*352*	*499*	*24*	*158*	*424*	*57*	*55*	*64*	*354*

Source: Raw figures supplied by GRO(S), percentages computed by authors.
Notes: 1. Ethnic group categories and age-groups are those supplied by GRO(S)

Table 19 presents findings from HSE 2004 showing the proportions and age-standardised risk ratios for minority ethnic groups compared to the general population. Black African men and Chinese men and women were less likely to report LLTI than the general population, while Pakistani women and Bangladeshi men were more likely to. Other differences were not statistically significant.

Table 19: Proportions and age-standardised risk ratios for LLTI by ethnic group, England, 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Population
Men								
%	**24**	**10**	**23**	**20**	**24**	**9**	**26**	**23**
RR	**1.00**	0.63	**1.12**	**1.17**	1.52	0.57	**1.11**	**1**
Women								
%	**28**	**15**	**19**	**30**	**21**	**10**	**23**	**27**
RR	**1.20**	**0.83**	**0.89**	1.60	**1.22**	0.46	**0.80**	**1**

Source: HSE 2004
Notes: Figures in bold indicate statistically significantly different from the general population (which was a representative sample of the population of England). Figures were standardised using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

The 2004 study of Gypsy and Traveller health reported that 39% of respondents had a limiting long-term illness or disability, far higher than the comparator sample included in the study, and higher than figures from other sources for any of the regularly enumerated minority ethnic groups (Parry et al., 2004).

LLTI: trends over time

Comparing the Health Survey for England data from 1999 and 2004, the level of reported LLTI fell among Indian women from 25% to 19%, but rose for Pakistani women from 23% to 30%. No other significant changes were apparent. In the FNSEM, age and sex-standardised rates of reported LLTI were similar across all the ethnic groups, except the Chinese who had a significantly lower rate. Therefore, though it is difficult to discern trends over time with any confidence, the evidence would suggest increasing, rather than decreasing, inequalities, among Bangladeshi and Pakistani groups compared to the White majority and a persistent advantage among the Chinese on this measure of health status.

Poor mental health or wellbeing

Assessing the relative prevalence of mental illness among different ethnic groups in Britain is both a controversial and complex field of investigation. Existing research evidence presents an inconsistent picture and much of it is based on service-based statistics rather than population-based surveys. An additional difficulty with exploring ethnic differences in mental health is the possibility that there are important cultural differences in the ways in which people experience and express mental illness, making the comparability of measures questionable (Sproston and Nazroo 2002). Qualitative work conducted in conjunction with EMPIRIC suggested ethnic differences in the description of certain diagnostically-important symptoms, especially among Bangladeshi people and those who were not interviewed in English, which may mean that itemised approaches to the measurement of mental health operate differently across ethnic groups (O'Connor and Nazroo 2002). The EMF includes a GHQ12 score of 4+ as a measure of poor mental wellbeing. Though this instrument has been used in the Health Survey for England with respondents from minority ethnic backgrounds, it should be noted that it has not been validated for specific minority ethnic groups and that it is possible that variability in the interpretations of the questions may affect comparability between ethnic groups.

GHQ12: current picture

In HSE 2004, Pakistani men and women were found to have a higher risk of a high GHQ12 score than the general population, as were Bangladeshi men. The risk of a high GHQ12 score did not vary significantly from that in the general population for any of the other minority ethnic groups. Sex differences suggest higher risks for women across most ethnic groups (as is seen in the general population), but these were largely not significant, except in the case of Black Africans (Table 20).

Table 20: Percentage of people with GHQ12 score 4+ and standardised risk ratios by ethnic group, England, 2004

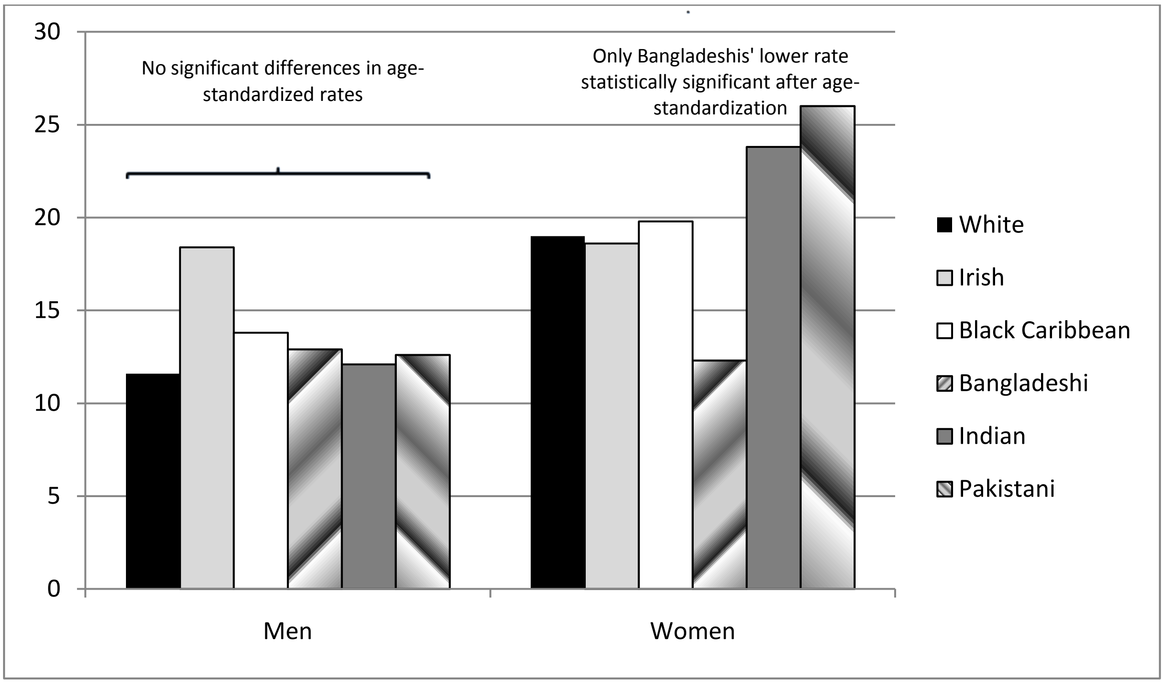
	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Popn
Men								
% 4+	**13**	**11**	**16**	**15**	**18**	**9**	**12**	**11**
RR	**1.21**	**0.88**	**1.32**	1.56	1.83	**0.76**	**1.08**	**1**
Women								
% 4+	**18**	**19**	**14**	**20**	**15**	**13**	**15**	**15**
RR	**1.27**	**1.19**	**0.99**	1.73	**1.37**	**0.83)**	**0.95)**	**1**

Source: HSE 2004
Notes: Bold figures indicate statistically significantly different from the general population. Figures were standardised using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

Neither the Scottish Health Survey nor the Welsh Health Survey includes sufficient numbers of people from minority ethnic groups to allow analyses by ethnicity.

Additional information is available from the EMPIRIC survey 2000 which focused on exploring patterns of mental ill-health across different ethnic groups (Sproston and Nazroo 2002). Rather than the GHQ12, this survey employed the Revised Clinical Interview Schedule to identify probable common mental disorder (CMD) (Lewis et al. 2009). The findings from this survey suggest that, among men, the prevalence of CMD was very similar in all groups apart from the Irish, who had a rate that was statistically significantly higher than the White group before adjusting for age. Among women, the rates were similar in the White, Irish and Black Caribbean groups, but significantly higher among Indian and Pakistani women. Bangladeshi women had a very low rate compared to the White group. However, once adjustments were made for the differing age profiles of the ethnic groups, the only statistically significant difference was the lower rate among Bangladeshi women when compared to the White women (Figure 4).

Figure 4: Percentage of people with high score on CIS-R by sex and ethnic group, England, 2000.



Source: EMPIRIC, 2000
Notes: Ethnic group categories are those supplied in EMPIRIC quantitative report (Sproston and Nazroo, 2002). Unweighted bases were for men: White (368), Irish (329), Black Caribbean (280) Bangladeshi (312), Indian (315), Pakistani (337), and for women: White (469), Irish (404), Black Caribbean (414) Bangladeshi (338), Indian (328), Pakistani (387).

Parry et al.'s (2004) study of Gypsies and Travellers found much higher levels of anxiety and depression among their Gypsies and Travellers sample than the comparator sample, with levels of these common mental disorders being particularly high among female Gypsies and Travellers. Another smaller study conducted in Sheffield also suggests very high levels of anxiety and depression among Gypsies and Travellers (Goward et al. 2006).

Aspinall and Watters' review reports that mental health is one of the most commonly reported health issues among asylum seekers including anxiety, depression, phobias and post traumatic stress disorder (PTSD), and that the provision of mental health services for this group, particularly for those that are survivors of torture and organised violence, is widely regarded as inadequate (Aspinall and Watters, 2010). They cite a study which reports that among asylum seekers and refugees in Warwickshire and Coventry, women frequently identified ways in which the asylum system impacted negatively on their mental health, with many experiencing high levels of anxiety (Phillimore and Goodson 2006).

GHQ12: trends over time

Comparisons between the findings from the 1999 and 2004 HSEs show some differences, though small numbers and the existence of just two sources of data preclude any definite conclusions about trends over time. Whereas in 1999 HSE, Bangladeshi and Pakistani men and women had a higher risk of a high GHQ12 score compared to the general population, in 2004 differences for these groups were replicated for Pakistani men (1.56) and women (1.73) and Bangladeshi men (1.83) but not for Bangladeshi women. In 1999, Chinese men and women were found to have lower rates of high GHQ12 scores than the general population, but this pattern was not repeated in the 2004 data. A decrease in rates of high GHQ12 score was also seen between 1999 and 2004 for Irish and Bangladeshi men and women, and Black Caribbean, as well as the general population.

Other mental health problems:

A widely cited finding in the literature is the apparently high rates of schizophrenia and other forms of psychosis among African Caribbean people. However, findings are not entirely consistent across different studies, and there have been few population surveys of ethnic differences in the prevalence of mental illness, with most work focusing on rates of contact with services for those with psychotic disorders (which reflect the responses of individuals and health professionals, as well as the actual prevalence of illness). EMPIRIC 2000 used the Psychosis Screening Questionnaire (PSQ) to assess psychotic symptoms - a tool that covers five broad categories of symptoms: hypomania; thought interference; delusions of persecution; a feeling that something ‘strange’ is taking place that is hard to explain; and auditory hallucinations. Two or three questions are used for each symptom category, and an informant must have answered ‘yes’ to all questions within a symptom category in order to screen positive on that item. The survey reports both positive responses to these psychosis symptoms and also uses a formula to estimate annual prevalence of psychosis in each ethnic group and by gender within ethnic group. In contrast to studies on rates of contact with services, EMPIRIC community-based findings indicated a twofold higher rate for Black Caribbean people (16 per 1,000) compared with the White group (8 per 1,000), and this was only statistically significant for women at the level of reporting psychosis symptoms on the PSQ. It was not significant for men or the total Black Caribbean population and was not significant at the level of estimated rates of psychotic illness. This finding is consistent with the only other national community survey that has estimated the prevalence of psychotic illnesses among different ethnic groups, the FNSEM 1993/4. Also, rates for Black Caribbean people were not particularly elevated among men, the young, or ‘non-migrant’ people. No other statistically significant differences were found between minority ethnic groups and the White majority for screening positive for psychosis or for the estimated prevalence of psychotic illness. However, it is possible that the tools used to capture psychotic illness do not function well for South Asian people (Sproston and Nazroo 2002).

Other specific health conditions of concern

Though beyond the scope of the EMF, it is important to identify a number of health conditions which are of particular concern in relation to people of minority ethnic identity. These include:

- Diabetes, particularly among Bangladeshi, Pakistani and Indian groups. The HSE 2004 showed that after adjusting for age diabetes was almost four times as prevalent in Bangladeshi men, and almost three times as prevalent in Pakistani and Indian men compared with men in the general population. For women, the increased risks were five times for Pakistani women, three times among Bangladeshi and Black Caribbeans, and two and half times among for Indian women.

- Haemoglobinopathies (thalassemia and sickle-cell anaemia), which are found across all ethnic groups but are more prevalent among people with ancestral origins in the Mediterranean, the Middle East, Africa and Asia (WHO Secretariat 2006).

- Infectious diseases including sexually transmitted diseases in migrant populations e.g. TB, HIV; a particular concern among forced migrants and asylum seekers. Aspinall and Watters (2010) have highlighted the growing concern about the increase in incidence of TB in those recently arrived from in the UK and the barriers to effective treatment that are faced.

- Female Genital Mutilation (also referred to as female circumcision) and its implications for health and well-being. FGM has been recognised as an issue among ethnic minority communities in Great Britain since the early 1980s. Morison et al. (Morison et al. 2004) state that '*estimates of numbers of circumcised women in Britain or of girls at risk of the practice are extremely crude as routine immigration data and data from the national census are not conducive to such calculations. Unpublished estimates by the Foundation for Women's Health Research and Development (FORWARD) are that around 25,000 first generation immigrants in Britain have undergone female circumcision whilst another 10,000 are at risk*' (p. 78). Aspinall and Watters (2010) discuss the high prevalence of FGM among asylum seekers from some parts of Africa, particularly the Horn of Africa, and highlight the potentially serious psychological and physical health impact, particularly where women find themselves unable to communicate effectively with healthcare staff and health professionals are ill-informed about FGM and its consequences.

HEALTH: process indicators

Low perception of treatment with dignity and respect

The Department of Health has published a report on the experiences of patients in Black and Minority Ethnic groups, based on data from the National Patient Survey Programme led by the Care Quality Commission, up to and including 2008 patient surveys (Department of Health, 2009). This report presents results from the 2008/09 adult inpatient, 2008/09 emergency department, 2007/08 primary care services and 2007/08 community mental health patient surveys. The report employs fairly broad ethnic group categories, which while less than satisfactory, do allow us to explore important differences in experience among minority ethnic patients in comparison with the White British majority. While these surveys cover many dimensions of the patient experience, we have extracted the data that correspond to the questions relating to the EMF core indicator - perception of treatment with dignity and respect. Unfortunately, the data that are currently published by the CQC do not include the basic rates, but rather just the odds ratios for answering 'yes, always' to questions about whether the respondent was treated with dignity and respect in comparison with the White British sample. Table 21 below presents these odds ratios for the results from four different NHS healthcare settings. There was no evidence that patients of minority ethnic background were less likely than the White British majority to report treatment with dignity and respect by psychiatrists in the community mental health setting. In contrast, in emergency care and the primary care setting all minority groups except the Irish were less likely than the White British to report that they had always been treated with dignity and respect. Looking across the minority ethnic groups, the Asian/Asian British group stand out as being significantly less likely than the White British to report that they had always been treated with dignity and respect in three out of the four settings. In the primary care setting, however, it was the Chinese who, in comparison with the White British, had the lowest odds ratio of reporting that their GP always treated them with dignity and respect. The report concludes that there are few changes over time between the earlier report in 2008 and this one a year later.

Table 21: Odds ratios of reporting 'yes, always' to question about being treated with dignity and respect in various NHS settings compared to White British group, by ethnic group, National Patient Surveys 2007/8 and 2008/9

	White: Irish	**White: Other**	**Mixed**	**Asian/ Asian British**	**Black/ Black British**	**Chinese/ other**
While in hospital	1.50	0.96	0.91	**0.80**	0.96	0.85
In the emergency department	1.10	**0.74**	**0.79**	**0.66**	**0.83**	**0.54**
By the doctor in primary care	0.95	**0.68**	**0.65**	**0.50**	**0.75**	**0.34**
By the psychiatrist in a community mental health setting	1.43	1.19	1.27	1.02	0.97	0.91

Source: (Department of Health 2009)

Notes: Question wording: ' Overall, did you feel you were treated with respect and dignity while you were in the hospital? / while you were in the emergency department?' 'Did the doctor / psychiatrist treat you with dignity and respect?'. Data for hospital stay and emergency are from 2008/9 and for primary care and community mental health are from 2007/8. Bold indicates statistically significantly different from White British reference group.

In addition to the information provided via the postal questionnaires of the National Patient Survey Programme, some information on perceptions of treatment with dignity and respect are available in national population-based surveys. We have performed some basic descriptive analyses using the 2007 Citizenship Survey of England (Table 22). The numbers are, however, small for the minority ethnic groups making the estimates imprecise and compromising our ability to detect differences between the groups. The proportion of respondents saying that they were treated with respect only some of the time or less was highest in the 'Any other mixed background', followed by the Chinese and the Bangladeshi. These findings for Chinese and Bangladeshi people are consistent with other sources of evidence, but were not statistically significant in this case. The low proportion among Pakistanis does not fit well with evidence from qualitative studies discussed more below.

Table 22: Percentage responses to question "In general, would you say that you are treated with respect when using health services" by ethnic group, England, 2007

	All the time or most of the time	Some of the time or less	N
White British	91.4	8.6	8,024
White Irish	93.1	7.0	166
Any other White background	87.9	12.1	316
Asian or Asian British - Indian	91.2	8.8	1,362
Asian or Asian British - Pakistani	91.8	8.2	806
Asian or Asian British - Bangladeshi	86.4	13.6	289
Any other Asian/Asian British background	90.9	9.1	278
Black or Black British - Caribbean	89.9	10.1	804
Black or Black British - African	86.8	13.3	811
Any other Black or Black British background	100	0	45
Chinese	85.0	15.0	160
Mixed White and Black Caribbean	90.0	10.0	188
Mixed White and Black African	88.9	11.1	108
Mixed White and Asian	88.9	11.1	90
Any other mixed background	84.2	15.8	92
Any other ethnic group	90.3	9.7	

Source: Citizenship Survey 2007, authors' analysis.
Notes: Overall Chi-Square, 19.39; df, 15; p= .197.

We explored the possibility of analysing the Living in Wales 2008 survey to examine perception of treatment with dignity and respect by ethnic group but the numbers of minority ethnic individuals included in the survey are extremely small. Less than 20 people gave responses to the relevant question in each of the groups Irish, Indian, Pakistani, Bangladeshi, Black Caribbean and Black African, so that no meaningful analyses could be carried out.

No data are yet available from the Better Together patient survey programme for Scotland. It is unclear whether these will sustain analyses by ethnicity when they become available, but this seems unlikely.

There are no large-scale quantitative data on 'dignity and respect' in healthcare services among Gypsies and Travellers, but this was a strong theme in the qualitative component of the Parry et al. (2004) study. The authors commented:

'The general mistrust of non-Travellers in wider society ... includes health staff. The everyday experience of racism and the defensive expectation of it underlie this widespread mistrust and give rise to low expectations of staff and service provision. The common experience of difficulty in gaining access to GP's and being registered is frequently attributed to racism, as is poor care. Mistrust is frequently manifested as fears, either of investigations, procedures or treatments. Close community and large family networks ensure stories of unpleasant experiences, medical mishaps or adverse outcomes are frequently recounted and so make the incidence of negative events appear higher. The reverse is also true with good reputations being well circulated. Avoidance behaviour is a common outcome arising from lack of trust. Lack of accurate information is compounded by usually poor communication with health staff and leads to reliance on trust rather than informed decision-making about health related options.' (pg 57)

Health-related behaviours and life-style factors

The HSE series is a useful source of information on health-related attitudes and behaviours, providing a wealth of indicators for a nationally representative sample. The HSE has taken a particular focus on the health of minority ethnic populations in 1999 and 2004, allowing some exploration of trends over time.

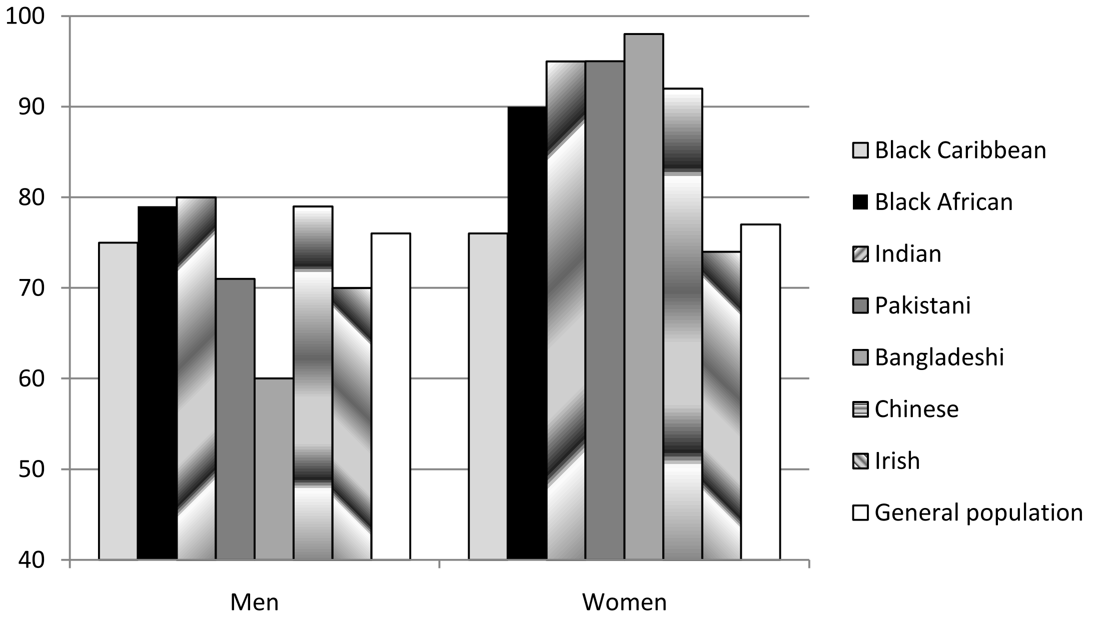
The national-level health surveys in Wales and Scotland do not include sufficient numbers of people from minority ethnic backgrounds to produce robust estimates of any of the life-style indicators.

Smoking

Percentage of people not currently smoking cigarettes: current picture

Data from the HSE 2004 indicate that overall, the percentage of men *not* currently smoking cigarettes was 76% among men in the general population. In comparison, 60% of Bangladeshis, 70% of Irish, 71% of Pakistanis, 75% of Black Caribbeans, 79% of Black Africans and Chinese, and 80% of Indians were not current smokers. After adjustment for age, Bangladeshi and Irish men were statistically significantly more likely, and Indian men less likely, to report smoking cigarettes than men in the general population. Self-reported smoking prevalence was higher among women in the general population than most minority ethnic groups, except Irish and Black Caribbean women. The percentage of women *not* currently smoking cigarettes was 77% in the general population, compared to 74% of Irish women, 76% of Black Caribbeans, 90% of Black Africans, 92% Chinese, 95% Indian and Pakistani, and 98% of Bangladeshi women (Figure 5).

Figure 5: Percentage of people *not* currently smoking cigarettes (self-reported) by sex and ethnic group, HSE, England 2004



Source: HSE 2004

It is worth mentioning that the Turkish population, who are not currently enumerated as a separate ethnic category, have been found to have very high levels of smoking among both men and women (Aspinall and Jacobsen, 2004). It should also be noted that though the EMF indicator focuses exclusively on smoking tobacco there are concerns about the level of tobacco chewing among some ethnic groups, particularly Bangladeshis. In the HSE 2004, 9% of Bangladeshi men and 16% of Bangladeshi women reported chewing tobacco and among women aged 35 years and over the figure was 26% (Sproston and Mindell, 2006b) and further analysis suggests significant under-reporting of tobacco use among this group (Roth et al., 2009).

Aspinall and Watters (2010) reviewed information on the health status of asylum seekers and refugee populations. They found a dearth of information on health-related behaviours in general, though there is some evidence from small scale studies of high rates of smoking in comparison with the general population.

There are currently no national data on smoking prevalence by ethnicity for Wales or Scotland.

The EMF does not include any HEALTH indicators related to the use of other drugs (except alcohol which is discussed below). However, there appear to be some important ethnic variations in drug use, as revealed by the British Crime Survey (BCS) (Aust and Smith, 2003). The chewing of qat (or khat; a shrub traditionally grown in North Africa) is largely confined to Somali and Ethiopian communities and may have significant effects on health and well-being.

Percentage of people not currently smoking: trends over time

The HSE 2004 reports on comparisons with the 1999 figures for cigarette smoking. The proportion of people not currently smoking in the general population rose to 76% of men and 77% of women in 2004, from 73% for both in 1999 (both significant increases). Among Black Caribbean men and Irish men and women, cigarette smoking was also less prevalent in 2004 than in 1999. The prevalence of non-smokers in Black Caribbean men rose to 75 in 2004 from 65% in 1999, in Irish men to 70% in 2004 from 61% in 1999, and in Irish women to 74% in 2004 from 67% in 1999. For all other minority ethnic groups no differences were observed over the time period.

Overweight and obesity

Percentage of people who are not overweight or obese: current picture

Data from the HSE 2004 shows that the prevalence of normal/healthy weight (BMI 18.5 to less than 25) varies greatly between ethnic groups, with the Chinese group having the highest proportions among both men and women. Across the ethnic groups, the sex pattern of normal/healthy weight varied. Whereas men are less likely to be of normal/healthy weight than women in the general population and among Black Caribbean, Chinese and Irish groups, it is women who are less likely to be of normal/healthy weight among the Pakistani, Bangladeshi and Black African groups. Having adjusted for age, Indian, Pakistani, Bangladeshi and Chinese men were less likely than the general population to be overweight or obese. Among women, age-standardised risk ratios indicated that Black African and Pakistani women were more likely than the general population to be overweight or obese, while Chinese women were much less likely to be so (Table 23).

Table 23: Percentage of people who are *not* overweight or obese by sex and ethnic group and standardised risk ratio of being overweight or obese, England 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Popn
Men								
% normal weight	**32**	**38**	**45**	**44**	**55**	**63**	**33**	**33**
RR	**1.02**	**1.00**	0.82	0.89	0.75	0.62	**0.99**	**1**
Women								
% normal weight	**36**	**31**	**45**	**37**	**49**	**75**	**42**	**43**
RR	**1.16**	1.37	**1.00**	1.24	**1.06**	0.46	**0.99**	**1**

Source: HSE 2004

Notes: RR= standardised risk ratio for being overweight or obese compared to the general population. Bold figures indicate statistically significantly different from the general population. Figures were standardised by age using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

It should be remembered that there is a lack of evidence of the validity of the thresholds currently adopted for defining overweight and obesity for different ethnic groups. In addition to the EMF indicator which is based on BMI, the HSE 2004 data enabled exploration of alternative indicators of obesity (and potential negative health effects) - raised waist-to-hip ratio (WHR) and raised waist circumference - which are considered more useful measures than BMI when comparing ethnic groups because they more clearly distinguish body fat from body shape. These measures showed somewhat different ethnic variations than those reported above for BMI. After age-standardisation, the risk of raised waist hip ratio (WHR) was higher than in the general population for Pakistani (1.46) and Bangladeshi men (1.34), and lower for Chinese (0.66) and Black Caribbean men (0.73). Black Caribbean, Indian, Bangladeshi and Chinese men had a lower risk of raised waist circumference than the general population. The risks of raised WHR and raised waist circumference were higher than the general population for women in most minority ethnic groups, except among Indian and Irish women, who had about the same risk as women in the general population, and Chinese women, who had a lower risk.

Percentage of people who are not overweight or obese: trends over time

Comparison of data from the 1999 and 2004 HSEs suggests an increasing level of overweight, obesity and WHR among most ethnic groups and both sexes, in common with the general population. Patterns between ethnic groups were similar across the years.

Physical activity

Percentage of people meeting government guidelines for physical activity: current picture

Data from the HSE 2004 reveal important differences in the proportion of people who report levels of physical activity that meet the government guidelines by sex and ethnic group. Across all ethnic groups, women are less likely than men to meet the guidelines, but the differences are particularly large for Indian, Pakistani, Bangladeshi and Chinese groups. In comparison to the general population, men and women in the Indian, Pakistani, Bangladeshi and Chinese groups are statistically significantly less likely to meet the guidelines (Table 24). Patterns by age were consistent across groups, with both men and women being less likely to take high levels of physical exercise at older ages.

Table 24**:** Percentage of people who reported meeting government guidelines for physical activity and standardised risk ratio of meeting guideline, by sex and ethnic group, England 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Popn
Men								
% meeting exercise guideline	**37**	**35**	**30**	**28**	**26**	**30**	**39**	**37**
RR	**1.03**	**0.84**	0.75	0.64	0.58	0.74	**1.05**	**1**
Women								
% meeting exercise guideline	**31**	**29**	**23**	**14**	**11**	**17**	**29**	**25**
RR	**1.17**	**1.03**	0.81	0.46	0.32	0.59	**1.08**	**1**

Source: HSE 2004
Notes: RR= standardised risk ratio for being overweight or obese compared to the general population. Bold figures indicate statistically significantly different from the general population. Figures were standardised by age using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

Percentage of people meeting government guidelines for physical activity: trends over time

Comparisons between HSE 1999 and 2004 showed inconsistent patterns with some sex-ethnic groups showing a slight rise and others a slight decline in the proportion meeting the guidelines. Overall, there was little evidence of any major shift in exercise levels over the period.

Healthy eating

Percentage of people meeting government guidelines for eating 5 a day fruits and vegetables: current picture

Findings from the HSE 2004 show that, with the exception of Irish men, the proportion of men meeting the '5 a day' guideline was significantly higher in all minority ethnic groups than among men in the general population. Chinese and Indian men were the most likely to report eating five or more portions of fruit and vegetables a day. Among women, the Chinese and Indian groups were also most likely to meet the guideline. Comparing to the general population, Black African, Indian and Chinese women were more likely to meet the guideline than the general population, while rates were similar among the other ethnic groups. Levels of consumption were more similar among men and women in the minority ethnic groups (with the exception of the Irish and the Chinese) than in the general population.

Table 22: Percentage of people who reported meeting government guidelines for daily fruit and vegetable consumption and standardised risk ratio of meeting guideline, by sex and ethnic group, England 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Popn
Men								
% meeting 5 a day guideline	**32**	**31**	**37**	**33**	**32**	**36**	**26**	**23**
RR	1.40	1.40	1.64	1.47	1.48	1.66	**1.14**	**1**
Women								
% meeting 5 a day guideline	**31**	**32**	**36**	**32**	**28**	**42**	**32**	**27**
RR	**1.16**	1.23	1.37	**1.19**	**1.00**	1.65	**1.24**	**1**

Source: HSE 2004
Notes: RR= standardised risk ratio for being overweight or obese compared to the general population. Bold figures indicate statistically significantly different from the general population. Figures were standardised by age using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

Percentage of people meeting government guidelines for eating 5 a day fruits and vegetables: trends over time

No important trends over time have been identified.

Alcohol use

Percentage of people reporting drinking in line with government's 'sensible' drinking guidelines: current picture

The HSE 2004 did not report on the prevalence of drinking within government guidelines in terms of units per day (though we do report this indicator from our own analyses in the Chapter on religion). Instead, the HSE main report reported on usual drinking frequency (Sproston and Mindell, 2006) and we reproduce the key indicators in Table 25 below. Across all ethnic groups women are more likely than men not to drink at all, and less likely than men usually to drink on three or more days in a week. There are also striking differences in alcohol consumption patterns across ethnic groups, with 97% and 98% of Bangladeshi men and women reporting that they do not drink at all, compared with just 8% of men in the general population. Among men, the Irish are more likely to drink on three or more days a week than the general population, but all other minority ethnic groups are significantly less likely to do so and the differences in the proportions are large in all cases. Among women, the Irish do not differ significantly from the general population, but again, among all the other minority ethnic groups women are significantly less likely to drink on three or more days in a week than the general population.

Table 25**:** Percentage of people who reported not drinking at all, drinking 3 or more days in a week, and standardised risk ratio of drinking 3 or more days in a week guideline, by sex and ethnic group, England 2004

	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish	General Popn
Men								
% not drinking at all	**15**	**32**	**33**	**89**	**97**	**19**	**10**	**8**
% drinking 3+days per week	**28**	**17**	**18**	**2**	**1**	**18**	**51**	**41**
RR	0.75	0.47	0.44	0.05	0.01	0.49	1.23	**1**
Women								
% not drinking at all	**21**	**45**	**59**	**95**	**98**	**33**	**11**	**14**
% drinking 3+days per week	**11**	**6**	**5**	**0**	**0**	**9**	**30**	**26**
RR	0.42	0.28	0.21	0.01	0.00	0.37	**1.06**	**1**

Source: HSE 2004

Notes: Not drinking at all includes those who have not drunk in past 12 months and those who never drink. Drinking within guideline includes those who do not drink at all. RR= standardised risk ratio for being overweight or obese compared to the general population. Bold figures indicate statistically significantly different from the general population. Figures were standardised by age using a bespoke, artificial standard population designed to minimise the increase in standard errors of the estimated risk ratios.

Alcohol consumption: trends over time

No important trends over time have been identified.

HEALTH & LIFE: autonomy

The EMF does not include any quantitative indicators of autonomy. A review of the available literature highlights some areas of concern:

- Lack of access to information and lack of familiarity with the system appears to make it more difficult for people from some minority ethnic backgrounds to exercise choice in terms of their healthcare and this is particularly true for new migrants and those with poor English language skills.

- Culturally incompetent services and practitioners can restrict the ability of people from minority ethnic backgrounds to engage with services in the ways that they would prefer. For instance, factors such as a lack of facilities for family members to be involved, inappropriate dietary provision, and a lack of privacy, particularly for women, can result in poor patient experiences and withdrawal from services/treatments.

- A lack of choice and control over their lives and the pervasive experience of discrimination are prominent issues for Gypsies and Travellers, as well as asylum seekers, that impact negatively on their health and well-being.

We discuss these issues more in the discussion section below.

Cross-over themes and vulnerable groups

As shown in Chapter 9 on Religion & Belief, several of the ethnic groups in Great Britain, including Indians and Black Africans, are religiously diverse and there is evidence to suggest that within these ethnic groups, Muslims often suffer poorer health than people reporting other religions. The reasons for this are not well understood, but are discussed in some detail in that Chapter.

The social construction of gender roles, responsibilities and expectations are often closely tied to ethnic identities, and women's norms of behaviour in particular are often taken as symbols of ethnic group inclusion and exclusion (both by those within and outside of particular ethnic groups). Therefore, it is not surprising that gendered patterns of health-related behaviour, as well as gendered health experiences and outcomes, vary between ethnic groups. This is illustrated in some of the indicators presented above - for instance patterns of smoking across gender vary importantly between ethnic groups. That said, some gendered differences are seen across all ethnic groups - such as women's disadvantaged position in relation to healthy levels of physical activity. The interplay of gendered and ethnic identities in relation to health experiences and outcomes has not been well articulated even in research that has foregrounded a concern with gender issues (Doyal, Payne and Cameron, 2003). Women from minority ethnic groups may, for a number of inter-related reasons, be more severely socioeconomically marginalised than men, and experienced higher levels of poor health. There are particular concerns regarding mental and maternal health among asylum seeking and refugee women, and evidence of very poor access to essential services. Gypsy and Traveller women also appear to be particularly disadvantaged. This area deserves further investigation.

Evidence from the Fourth National Survey of Ethnic Minorities suggests that ethnic inequalities in health in the United Kingdom increase with age, with relatively small differences at younger ages and larger differences emerging from the mid-30s onwards. The data presented above also highlight the particularly high levels of ill-health among older Pakistani and Bangladeshi people. The Equalities Review (The Equalities Review 2007) also noted the greater ethnic health inequalities at older ages, but also that ill-health and associated health and social care needs tend to appear at a younger age for Pakistani and Bangladeshi people than average. Many ethnic minority older people live in areas of high deprivation, have poor English language skills and limited knowledge and understanding of available services, making them particularly vulnerable to poor health and well-being (Allmark, et al., 2010; Grewal et al., 2004).

There is evidence to suggest that the experiences of disabled people may be patterned by their ethnic identity as well as their religious affiliation and their faith (Atkin, Ahmad and Jones, 2002b; Molloy, Knight and Woodfield, 2003). Factors that may contribute to such differential experiences include: cultural or religiously based understandings of the ‘meaning’ of disability and appropriate individual, familial and community-level responses to disability; faith as a resource for ‘coping’ with/adjusting to disability; and formal and informal ethnic and religiously based networks of support (Salway, et al., 2007). There is evidence to suggest that services designed to support disabled people’s health and wellbeing frequently do not adequately respond to ethnic and religious diversity (Allmark, et al., 2010; Atkin and Ahmad 2000; Atkin, Ahmad and Jones 2002a).

Discussion

What are the key inequalities? How persistent and how worrying are they?

Among the main enumerated ethnic groups, Pakistani and Bangladeshi people stand out as having the worst health profile (and probably the lowest life expectancies), though most minority ethnic groups have worse general self-reported health than the White British majority. These inequalities are persistent and do not appear to be improving across generations for most groups (Smith, Kelly and Nazroo, 2009). It should be remembered, however, that some of the ethnic categories currently in use are broad. These categories conceal important heterogeneity and potentially hide even more disadvantaged 'groups' from view.

There is evidence that other groups about whom very little research has to-date been conducted - notably Gypsies and Travellers, asylum seekers and refugees - have particularly low levels of health and wellbeing and severe problems in accessing services.

It is important to recognise that there is variation both within religious groups by ethnicity and within ethnic groups by religion (see Chapter 9 on Religion & Belief).

The persistent failure of NHS health services to respond effectively to ethnic diversity and ensure equitable experiences and outcomes for patients of minority ethnic identity is a cause for concern; we discuss this more below.

Are there any emerging trends?

The growing ethnic diversity of Great Britain's population, both in terms of the size of the minority ethnic population and the range of ethnic, religious and linguistic groups that are represented, presents significant challenges for those charged with promoting the public's health and well-being.

New waves of migration are bringing to Britain new migrant groups with health needs that differ from the established communities. At the same time, a growing proportion of people are identifying themselves as being of 'mixed' ethnic identity.

Established minority ethnic communities are now ageing with a consequent increasing level of ill-health and greater demands on services that are largely ill-equipped to provide culturally competent care.

Some of the factors that seemed to protect/enhance health for first generation migrants appear to be diminished in second and third generation migrants, for instance some dietary habits. Some health advantages in first generation migrants are not well explained, but the picture among second generation migrants is worsening, for instance there appears to be a rising incidence of some cancers.

What are the causes?

Ethnic inequalities in health are complex and have multiple contributing factors, many of which remain poorly understood. Ethnic inequalities in healthcare access, experience and outcomes also have complex patterns of causation and it is often difficult to assess whether differences necessarily constitute inequities.

Genetic and biological factors

There is more genetic variation *within* ethnic groups than *between* them. This does not mean, however, that differences in *some* health problems observed between ethnic groups are not influenced by genetic factors. Though ethnic groups are social constructions, varying across time and place, and are generally very poor proxies for genetic markers, there are two principal mechanisms through which ethnic group boundaries can either reflect or produce genetic variation along ethnic lines. First, the classification of ethnic groups frequently draws on phenotypic characteristics (including, for example, skin colour) or geographical ancestry (including, for example, grand/parental origins) and so the genetic traits that are more commonly associated with these characteristics and geographical regions will be more commonly found amongst individuals classified within particular ethnic groups (including, for example, certain types of skin cancer and sickle cell trait). Likewise, the classification of ethnic groups frequently draws on cultural or political characteristics (such as religious, language or structural barriers) that encourage endogamous marriage (that is marrying someone seen to belong to the same ethnic group) meaning that particular genetic traits may become concentrated and more common amongst individuals classified within particular ethnic groups (including, for example, Tay-Sachs trait amongst Ashkenazi Jewish populations). However, the extent to which genetic traits are concentrated within particular groups varies from group to group, as does the relative impact of such genetic difference on disparities in health. Moreover, only a minority of variable genetic traits seem to vary by contemporary ethnic categories (around 3-7%) and only a small proportion of these traits (perhaps as small as 5-10%, though no one is yet sure) are likely to directly or indirectly affect health.

That said, Davey-Smith et al. (2000) caution against discounting the role of biological factors entirely, saying that '*many important determinants of health are physiological characteristics which are strongly influenced by socioeconomic and other environmental factors, and in turn have a long-lasting influence on health….. Several aspects of bodily habitus, such as birthweight, growth in childhood, achieved height and lung function, are factors which are at the same time socially produced and biological*' (p401).

Astin and Atkin (2010) have reviewed evidence on IHD and ethnicity highlighting both that some biological factors associated with IHD do appear to vary across ethnic groups but also that the significance of known risk factors for levels of disease varies across individuals and groups. *'Diet, lipoprotein metabolism, cholesterol levels, physical activity and socioeconomic status not only influence one another but are potentially changed by other biological processes that occur within the human body'* (p2). Astin and Atkin (2010) argue that biological factors should be explored in conjunction with psychosocial and contextual factors. Drawing on the Fourth Joint European Societies' Task Force on Cardiovascular Disease Prevention in Clinical Practice (Graham et al., 2007), they note that '*depression, social isolation, a lack of social support and work and domestic stress are recognised as important factors that* *contribute to the development of CHD and subsequent prognosis'* (p2), so that a narrow focus on biological factors or life-style behaviours is misleading.

There is widespread consensus amongst geneticists and epidemiologists that genetic factors contribute only marginally to ethnic inequalities in health, and that cultural and structural factors which result in very different levels of social and environmental health risks across ethnic groups are far more important. Nevertheless, while it is important to resist the 'racialization' of research and healthcare policy and practice which focuses disproportionately on genetic difference, there is a need to consider the role that biological factors, and their complex interplay with environmental factors, can have on ethnic inequalities in health (Davey-Smith et al., 2000). Currently, our understanding of these complex processes is very limited.

Migration

Davey-Smith et al. (2000) provide a useful summary of the varied ways in which a history of migration might contribute to the explanation of health disparities between ethnic groups, including: health-related risk exposures prior to migration (including for example, trauma experienced by asylum seekers), healthy migrant selection effects, return migration when sick or elderly, and the stress associated with the migration process itself. Some of these factors would tend to reduce health and mortality differentials between migrants and the established population. None can explain the persistent health disadvantage among second and third generation migrants. Migration may, however, have a prolonged and cross-generational effect because of its links to low socioeconomic status, racism and social exclusion.

Norms, behaviours and expectations

Holding a particular ethnic (and often religious) identity may imply certain sets of beliefs and behaviours that have implications for health and healthcare outcomes and experiences. Therefore, though there is great diversity within groups as well as change over time in cultural practices, at an aggregate level culturally informed beliefs, attitudes, preferences and associated behaviours may account for some of the observed inequalities presented above. The most obvious area where these factors may be important relates to healthy life-styles; though it should be noted that minority ethnic groups do better than the White British majority on some key life-style related risks including alcohol consumption and smoking among women. Dietary patterns are often implicated in the higher levels of IHD among some South Asian groups, though there is limited firm evidence to confirm this association (Brock et al., 2009)

Cultural and religious beliefs and understandings may also shape specific health-seeking behaviours and the degree of adherence with the advice and prescriptions of health professionals (as discussed more in the Chapter 9 on Religion & Belief). Some studies suggest that people from some minority ethnic groups, particularly the Chinese, are more likely to self-medicate and use complementary medicines than White British people and that this may conflict with advice offered by health professionals (Higginbottom, 2008; Boreham, 2006). Such individual behaviours must, however, be seen within the context of the healthcare system and the degree to which cultural preferences are understood, respected and accommodated (as discussed further below).

Ethnic (and religious) identity also implies inclusion within (and exclusion from) particular networks of support. As well as shaping beliefs, values and behaviours, such networks may provide access to resources, including information, which can promote health and well-being. Evidence suggests that people of minority ethnic identity, particularly those of lower socioeconomic status and newer migrants, are commonly heavily dependent upon such ethnic networks for information and support in negotiating access to statutory services, including healthcare (Salway et al., 2007). Since such networks, which may include community-based organisations, vary in the quality and quantity of support they can offer, individuals who rely on such networks may struggle to access appropriate care and entitlements (Allmark et al., 2010).

The factors discussed so far, though relevant to our understanding of health and healthcare needs among different ethnic groups, are far less important in explaining observed inequalities than the following inter-related factors: socioeconomic status; design and delivery of the healthcare system; and exclusion and discrimination.

Socioeconomic status and deprivation

A growing body of evidence indicates that a large part of the health disadvantage experienced by certain minority ethnic groups in Great Britain is explained by their poorer socioeconomic position relative to the White British majority. We review in this section (i) the evidence that minority ethnic groups have a poorer socioeconomic profile than the majority White British; (ii) that there is an association between health outcomes and socioeconomic status among minority ethnic groups (as has been widely demonstrated for the majority White British population), and (iii) that a proportion of the excess risk of poor health outcomes among some minority ethnic groups can be attributed to their poorer socioeconomic circumstances.

Ethnic inequalities in socioeconomic circumstances:

The socioeconomic profile of Britain's ethnic groups is described in detail in another of the Triennial Review background papers and we do not repeat that analysis here. Instead, we highlight the key patterns that are relevant to the present discussion. Berthoud's (Berthoud, 1998) analysis of data from the Fourth National Survey of Ethnic Minorities and the Family Resources Survey provided a detailed description of income sources and levels among minority ethnic households. While the profiles were diverse both within and between the groups, there was compelling evidence that Pakistanis and Bangladeshis *'were strikingly - shockingly - the worst off ethnic groups in Britain'* (p43). The Black African group also tended to fair worse than Black Caribbeans, who in turn had lower incomes than Whites. The Indian group tended to earn as much as the White majority, but larger family sizes meant that overall prosperity was lower on average. The Chinese population were harder to characterise in terms of income levels due to small samples, though working Chinese families did have relatively high incomes. Platt's more recent report to the DWP on child poverty (Platt 2009) using a range of data including the Family Resources Survey 2002-6 has again highlighted the stark ethnic differentials. She summarises the situation as follows: *"All minority groups have higher rates of poverty than the average and compared to the White majority, according to the standard measure adopted by the Government for monitoring child poverty. With a fifth of children in poverty overall, Black Caribbean and Indian children had rates of poverty* *of 26 and 27 per cent rising to 35 per cent for Black African children. Over half of Pakistani and Bangladeshi children were in poverty according to most recent figures."* Evandrou's analysis of the GHS (1991-6) focused on the socioeconomic status of older people and found significant differences both between and within minority ethnic groups (Evandrou, 2000). Evandrou reports that in her sample, 1/5 of White, and 1/4 of Irish people aged 60 years or over were in the poorest 20% of the income distribution compared with 1/3 Black Caribbean, 1/2 Indian, and 3/5 of the combined Pakistani/Bangladeshi group of older people. Evandrou also found that a lower proportion of minority ethnic older people were in receipt of a pension from their former employer than White or Irish elderly people and that while over 3/4 of the older Pakistani/Bangladeshi group and 3/5ths of older Black Caribbeans were in receipt of Income Support the comparable proportion for White older persons was 1/3. Over half of Pakistani/Bangladeshi, 2/5ths Black Caribbean and 1/4 of Irish older people were found to experience high or medium levels of deprivation.

The HSE 2004 data also provide a useful summary of the socioeconomic profile of different ethnic groups (Table 26), illustrating clearly the disadvantaged position of the Pakistani, and particularly the Bangladeshi, groups. The proportion of people falling into the bottom income quintile is lower for all the minority ethnic groups than the White British majority, though the differences are small for the White Irish, Chinese and Indian groups.

Table 26: Indicators of socio-economic position by ethnic group, England, 2004

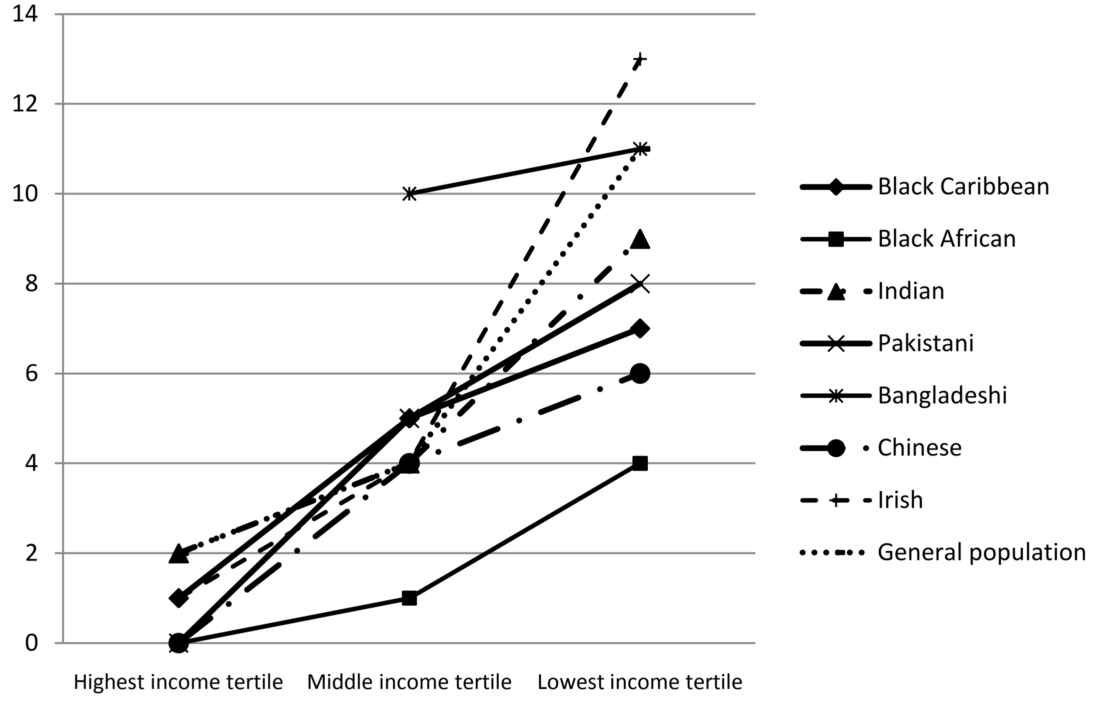
	No qualific-ations	***Manual occupation***	***Registered unemployed***	***Unemployed or long-term sick***	***Bottom income quintile***
			Cell percentages		
White British	30	46	2	6	17
White Irish	31	47	3	8	18
Black Caribbean	32	54	6	12	36
Black African	20	41	6	10	42
Indian	28	44	3	7	28
Pakistani	44	61	6	12	52
Bangladeshi	52	74	9	13	72
Chinese	25	43	5	6	21

Source: HSE 2004, authors' analysis.
Notes: Indian includes African Indians. White British includes White Other.

Differentials in health status by income among ethnic groups:

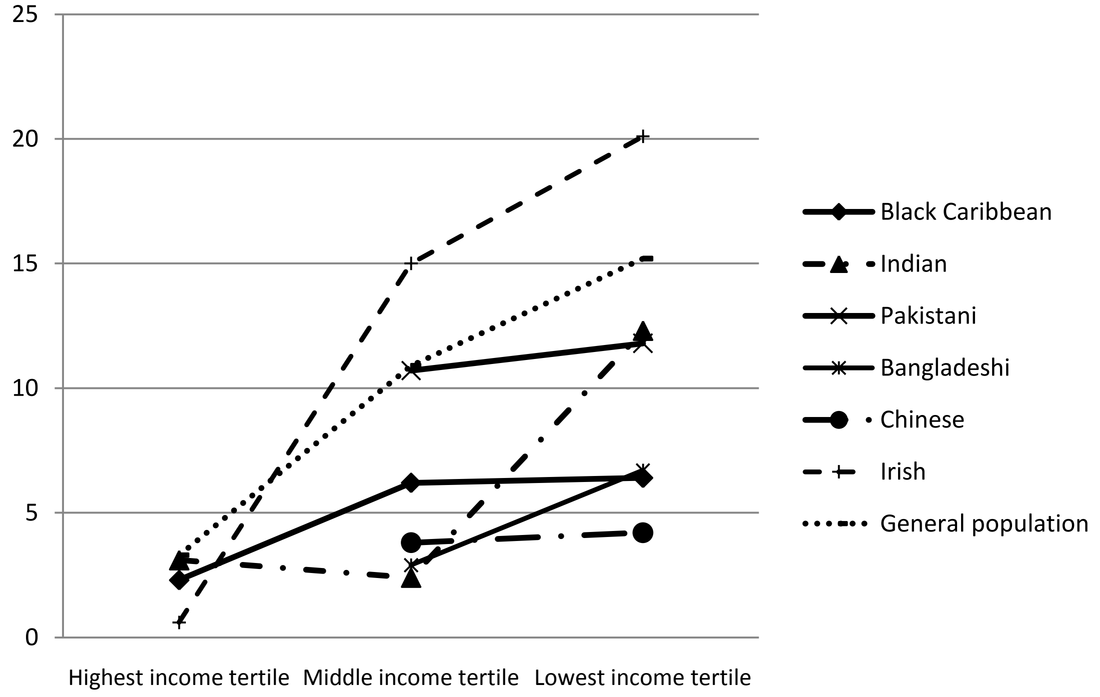
HSE 2004 data show very consistent patterns of rising proportions of people reporting poor health with declining income tertile within almost all ethnic groups for self-reported bad/very bad health, LLTI, and GHQ12 score of four or more. The few exceptions tend to be where numbers are too small to produce robust estimates (e.g. there were small numbers of Chinese people in the lowest income tertile and small numbers of Bangladeshi and Pakistani people in the highest income tertile making it difficult to discern patterns for these groups). Figure 6 shows this pattern for self-reported bad/very bad health, and Figure 7 for cardiovascular disease.

Figure 6: Percentage of men reporting bad/very bad health by income tertile and ethnic group, England 2004



Source: HSE 2004. Not standardised for age.

Figure 7: Percentage of men reporting IHD or cerebrovascular disease by income tertile and ethnic group, England 2004



Source: HSE 2004. Not standardised for age.

Exploring the contribution of socioeconomic status to ethnic health inequalities:
We turn now to consider the extent to which the poorer socioeconomic status of several of the minority ethnic groups might contribute to their poorer health outcomes when compared to the majority White British. One way to assess the contribution of socioeconomic factors to the excess burden of ill-health experienced by minority ethnic groups is to model the odds of a particular health outcome both without controlling for socioeconomic status and with suitable controls and then to compare the odds ratios. An important decline in the size of the odds ratio when controls are included in the model would tend to suggest that part of the excess health risk experienced by the minority group is 'explained' by their poorer socioeconomic status. There are, however, some important conceptual and methodological caveats that should be borne in mind. Kaufman et al. (1997) and Karlsen and Nazroo (2009) discuss these issues in more detail. In brief, it is extremely difficult to control for differences in socioeconomic status between ethnic groups in practice because within any measure of socioeconomic status the profile for minority groups tends to be less favourable than for the majority. In other words, ethnic groups differ on so many dimensions of socioeconomic status that there will always be residual confounding with any adjustment that an analyst might realistically make. Furthermore, the act of controlling for socioeconomic status may inadvertently imply that socioeconomic factors confound, or obscure, the 'real' relationship between ethnicity and health, and thereby may direct attention towards essentialist cultural or genetic accounts of health inequalities. It is important not to overlook the fact that socioeconomic disadvantage is intimately bound up with holding a minority ethnic identity in that societal processes of exclusion and discrimination sustain such disadvantage. In other words, weak material and social resources must in part be seen as lying on the causal pathway between minority ethnic identity and health outcomes, rather than as something separate. Notwithstanding the need for caution in interpretation, an exploration of odds ratios adjusted for indicators of socioeconomic position can provide some indication of the potential role that these factors play in ethnic health inequalities.

Nazroo (1997) performed analyses of the FNSEM 1993/4 data to explore the extent to which the poorer socioeconomic profile of minority ethnic groups could explain their increased prevalence of ill-health. In these analyses, rather than using a single measure of social class, Nazroo used a combination of variables in an attempt to better 'control' for the effects of poorer socioeconomic position, including a standard of living index (overcrowding, household amenities, consumer durables and access to car), social class and housing tenure. We present below in Table 27 and Table 28 figures from these analyses that were presented in Davey-Smith et al. (2000) relating to 'fair/poor health' and diagnosed heart disease respectively. The most obvious patterns are for the combined Bangladeshi/Pakistani group where controlling for class and for standard of living substantially reduces the relative risk of ill-health. Indeed, in the case of heart disease, when standard of living is controlled for the excess risk is no longer statistically significantly different from the majority White group.

Table 27: Relative risk compared to Whites of reported fair or poor health, standardised for socioeconomic factors, England, 1993/4

	Black Caribbean	Indian and African-Asian	Pakistani and Bangladeshi	All minority ethnic
Age and sex	**1.25**	0.99	**1.45**	**1.17**
Class, age and sex	**1.15**	1.00	**1.36**	**1.14**
Tenure, age and sex	**1.17**	1.04	**1.45**	**1.18**
Standard of living, age and sex	**1.15**	0.94	**1.24**	1.08

Source: FNSEM 1993/4; (Davey-Smith et al. 2000)
Note: Figures in bold indicate statistically significant from 1.

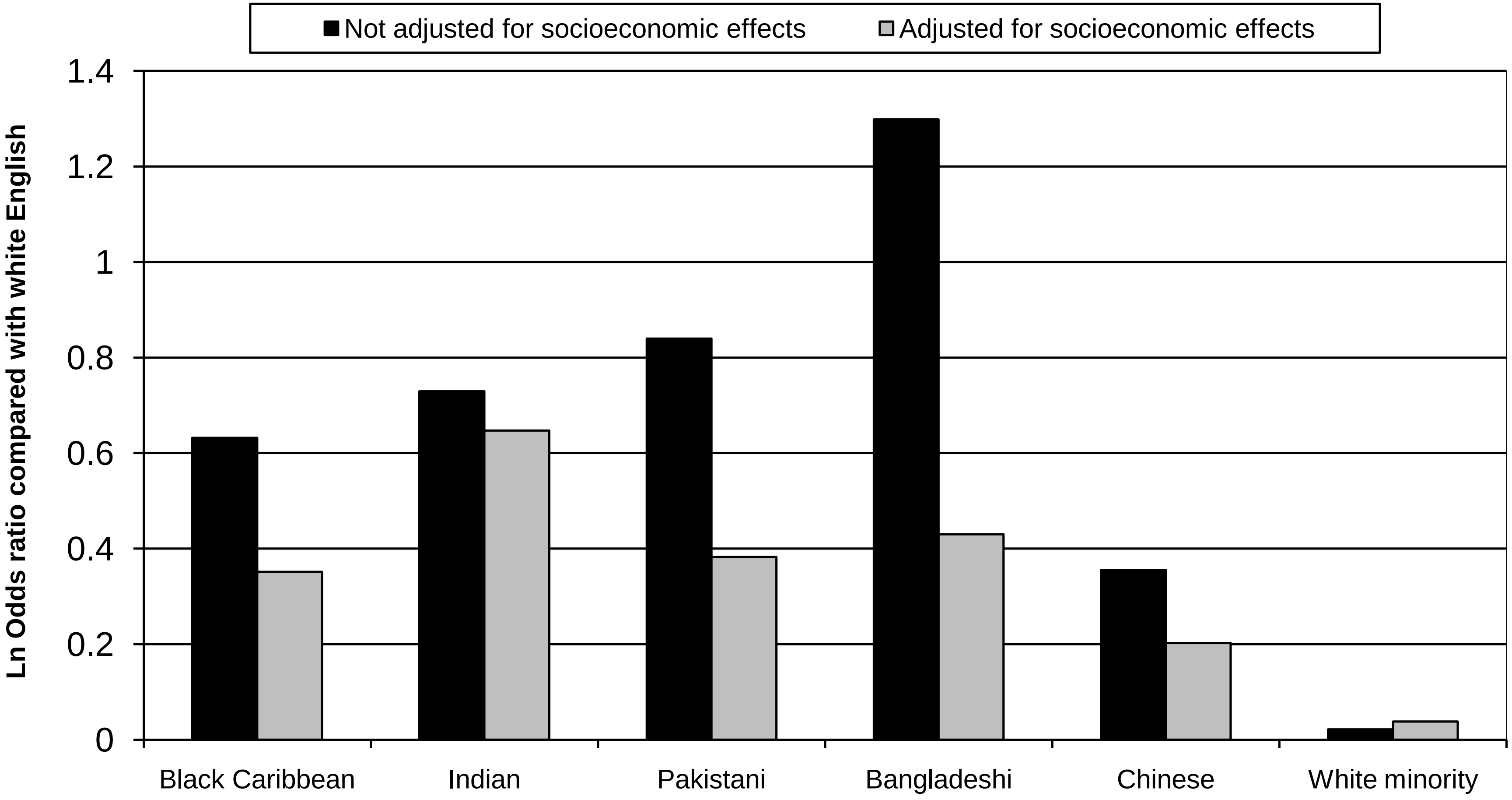
Table 28: Relative risk compared to Whites of diagnosed heart disease, standardised for socioeconomic factors, England, 1993/4

	Black Caribbean	Indian and African-Asian	Pakistani and Bangladeshi	All minority ethnic
Age and sex	0.95	0.77	**1.50**	0.97
Class, age and sex	1.05	0.92	**1.49**	1.10
Tenure, age and sex	0.93	0.85	**1.57**	1.05
Standard of living, age and sex	1.02	0.67	1.24	0.92

Source: FNSEM 1993/4, (Davey-Smith et al. 2000)
Note: Figures in bold indicate statistically significant from 1.

More recent analyses using data from HSE 1999 allowed Nazroo (2003) to examine these relationships across a larger number of ethnic groups. Looking at the outcome self-reported 'fair or poor' health, and controlling simultaneously for several socioeconomic indicators (income, housing tenure, economic activity), Nazroo found a clear and large reduction in relative risk compared to the White British comparator group for most groups (shown in Figure 8). Only the White minority (predominately Irish) group (which had odds close to 1) and the Indian group (for whom the reduction in relative risk was small) were the exceptions. We present other similar analyses using religio-ethnic groups in the Religion Chapter that have used 1999 and 2004 HSE datasets combined and present a similar picture.

Figure 8: Effect of adjusting for socioeconomic factors on odds ratio of reporting fair or poor health minority ethnic groups compared with White English group (Ln odds ratio), England 1999



Source: HSE 1999, Nazroo (2003)

Though data do not allow similar analyses for Gypsies and Travellers, available evidence points to the very significant contribution of poor socioeconomic conditions to the high levels of ill-health of these groups. Poor accommodation is a key factor for these groups as well as low levels of income and education (Parry et al., 2004; Goward et al., 2006).

There is also evidence that access to state welfare benefits intended to offset the financial implications of poor health is poorer among minority ethnic groups than the majority White British (Salway, et al. 2007b; Allmark et al., 2010).

The evidence presented above suggests an important role for low socioeconomic status in explaining the excess risk of ill-health among minority ethnic groups in Great Britain. However, it also suggests that inequalities in socioeconomic circumstances cannot fully explain the observed differences in health between ethnic groups (Nazroo, 2003).

Design and delivery of healthcare

We turn now to consider the role of the health system and whether the ways in which health services are designed and delivered may contribute to the health inequalities described. Notwithstanding the dominant role of poor socioeconomic circumstances in shaping health outcomes for the majority of minority ethnic people in Great Britain, timely access to appropriate and effective healthcare – such as cancer screening programmes or heart surgery – can and should have an important impact (Davey-Smith et al., 2000). We look first at health policy and broader strategy which defines the priorities for the health service to see whether and how ethnicity has been considered. We then explore the evidence relating to service access and utilization and healthcare outcomes. Finally, we describe evidence relating to the experiences of patients within the NHS since where these are poor it may suggest sub-optimal care and unacceptable treatment even for minority ethnic groups that have relatively good indicators of health overall (such as the Chinese).

Health policy and strategy:

Government health policy in Great Britain, and particularly in England, has emphasised the importance of understanding and tackling ethnic disparities in health and healthcare for at least four decades. A large number of general policy documents have focused on ethnic health inequalities (NHS Scotland 2006)(NHS Scotland 2006) and the importance of increasing cultural competence among providers and in service settings. There is also evidence that where national-level research has documented significant ethnic health inequalities the government has responded by further investigation and policy responses. For instance, the five-year *Delivering Race Equality in Mental Health* (Department of Health 2005) initiative was a response to the poorer mental health experiences of people from minority ethnic backgrounds (starkly evidenced in the tragic death of David Bennett), and the *No Patient Left Behind* policy document responded directly to evidence of poorer primary care experiences among minority ethnic patients (Lakhani 2008).

There are also some areas of specific health policy where the importance of addressing the needs of specific ethnic groups has been clearly articulated. For instance, the National Service Framework for heart disease has been extended to give a special focus to South Asian groups (Department of Health 2004) and the National Service Framework for Mental Health (Department of Health 1999) gives some attention to the differential needs of minority ethnic groups .

There is also evidence that the needs of particularly marginalised minority ethnic groups are gaining attention at policy level. For instance, CEMACH (Lewis 2007) included specific attention to migrant women within its top ten recommendations stating that *'All pregnant mothers from countries where women may experience poorer overall general health, and who have not previously had a full medical examination in the United Kingdom, should have a medical history taken and clinical assessment made of their overall health, including a cardio-vascular examination at booking, or as soon as possible thereafter. This should be performed by an appropriately trained doctor, who could be their usual GP. Women from countries where genital mutilation or cutting is prevalent should be sensitively asked about this during their pregnancy and management plans for delivery agreed during the antenatal period.'* The Scottish Government's document *Fair for All* makes explicit reference to Gypsies and Travellers, as does a recent Welsh review, both of which emphasise the significance of discrimination in the lives of these people (cited in Parry et al. 2004).

The Department of Health has also invested significant resources in special initiatives aimed at encouraging innovative policy and practice responses to the persistent inequalities, such as Race for Health (Race for Health 2009) and Pacesetters.

Despite this apparent policy commitment to take ethnic health inequalities seriously, attention to ethnic inequalities has yet to be mainstreamed and many areas of health policy remain poorly specified with respect to the needs of minority ethnic communities. Furthermore, as we describe more below, there has been disappointing translation of policy statements into positive change on the ground (Atkin and Chattoo. 2007; Culley and Dyson, 2001). A lack of evidence on the effectiveness of interventions aimed at tackling ethnic health disadvantage has no doubt impeded progress (Oakley, 2006). It is noticeable, for instance, that the majority of NICE Public Health guidance documents include very few recommendations in relation to minority ethnic populations and instead contain only generic statements about the need for interventions to be 'culturally and religiously appropriate' or similar. However, additional, systemic factors are also at play. It has been argued that UK public policy relating to minority ethnic communities has lacked coherence, with initiatives relating to immigration control and citizenship clashing with those relating to race equality (Hepple, 1992). UK health policy and practice has been found to struggle to reconcile these conflicting messages and to fail in establishing improved services and outcomes for minority ethnic populations, frequently locating the causes of poor health with those who are deprived (Atkin and Chattoo, 2007). It is noticeable that the significant attention to tackling health inequalities in the UK in recent years has been framed almost entirely in terms of socioeconomic disparities, in contrast for instance with the US where the racial/ethnic dimension of health disparities has been emphasised far more (Exworthy et al., 2006). This bias in UK policy is exemplified by the limited attention to ethnicity (or other axes of difference and inequality) within the recent Marmot Review (Salway, et al., 2010). The work of the Equality and Human Rights division of DH, while a very positive step forwards, remains divorced from this high profile health inequalities agenda; a situation which serves to marginalise its contribution and reinforce the perception that the health issues facing minority ethnic populations lie in their own cultural mores rather than in the broader social and economic hierarchies of UK society.

Access and uptake of services:

There is a widespread concern that many of the health services commissioned and delivered by the NHS fail to adequately meet the needs of our diverse, multiethnic population (Atkin and Chattoo, 2007; Culley and Dyson, 2001). However, assessing whether the uptake of services across ethnic groups is inequitable is extremely difficult (Aspinall and Jacobson, 2004) and the volume of high quality evidence in this area remains limited. Studies that examine the utilization of primary and secondary care services must generally take into account the level of need before conclusions about (in)equity can be drawn. Assessing the appropriateness or effectiveness of care received is even more complex and will often need to take account of potential ethnic variation in preferences and incorporate patient-defined outcomes (Astin and Atkin, 2010). Where evidence of ethnic differences in the care received and/or outcomes achieved are found, it is very difficult to establish the factors causing such differential receipt and few rigorous studies have been conducted to date. Nazroo et al. (2009) note that research in this area in the UK has tended to explore a limited range of conditions, to use local-level rather than national data, and to exclude individuals with undiagnosed disease. Despite these complexities, a growing body of quantitative and qualitative research evidence suggests that important ethnic differences do exist, at least in some areas of healthcare.

Looking first at utilization and access to services, analyses have tended to show that people from minority ethnic groups are more likely than the majority White British population to see their GP, but less likely to access some more specialist types of primary care service. Nazroo et al. (2009) used data from the HSE 1999 and 2004 to explore ethnic patterns of health service utilization. Age- and sex-adjusted odds compared with the White majority group showed that, having controlled for self-reported health status, Black Caribbean, Indian, Pakistani and Bangladeshi respondents were all *more* likely to have visited their GP in the last two weeks.

However, all minority ethnic groups, Irish and Chinese included, were *less* likely to report visiting a dentist for check-ups.

GP Patient Surveys have, however, tended to suggest that levels of access in relation to expectations and demand are somewhat lower for minority ethnic groups when compared to the White British majority. In 2007, the DH conducted the first national GP patient survey. It was sent to five million people selected at random from GP practices' lists of NHS patients in England. Results showed the majority of patients to be satisfied with access to primary care. However, people from minority ethnic groups reported, on average, significantly worse access than White British people.   For example, 32% of Pakistani and 33% of Bangladeshi respondents answered 'no' to the question *'In general, are you satisfied with how easy it is to get through to someone on the phone at your doctor's surgery?'* compared to 12% of White British respondents. When asked whether they were able to book an advance appointment, 43% of Bangladeshi and 37% of Pakistani respondents said 'no' compared to 24% of White British people. The DH report concluded that overall Black populations are 5-10% less satisfied, Asian populations are 5-10% less satisfied, and Bangladeshi communities are 20% less satisfied than White populations (DH, 2009). Satisfaction was significantly lower in practices with a high proportion of minority ethnic patients, but even within the same practice satisfaction was lower among minority ethnic patients than White patients. Lower rates of satisfaction were associated with large practices in deprived areas serving a significant minority ethnic community.

Access to GP services in Scotland has also been assessed via a postal survey of a random sample of patients from over 1,000 GP practices in 2008/9 (Scottish Government, 2009). The survey found that whereas 8% of White respondents reported that they had *not* been able to obtain an appointment within 48 hours when needed, the figure was 12% for Asian respondents. In the case of access to an advance appointment, 20% of White respondents answered 'no' compared to 23% of Asian respondents. Clearly, these results suggest higher levels of satisfaction overall and smaller ethnic differences than those for the English survey, though the patterns are in the same direction.

Though a number of factors may underlie such differential satisfaction with access including area- or practice-level effects that could apply locally regardless of ethnic identity, other evidence suggests that minority ethnic people may find it harder to access appointments with a GP in some areas. The following quote is from a Somali respondent in a recent qualitative study (Gerrish, Ismail and Naisby, 2009).

> *"When you ring for an appointment they will say we don't have one but when someone that they know rings they will give an appointment to them and they can tell who is ringing, is it Somali or Asian"*.

There is also strong evidence that Gypsies and Travellers and also asylum seekers and refugees have poorer access to GPs and other primary care services. Parry et al., (2004) report severe difficulties in registering with a GP among Gypsies and Travellers. They found that 16% of their respondents were not registered with a GP either where they were living or elsewhere, and the proportion was as high as 38% for those living in trailers on empty land and 37% for those who travel all year. In terms of contact with specific health (or health-related) professionals in the past year, Parry et al. (2004) found that, compared to the comparator group of non-travellers included in their study, Gypsies and Travellers were less likely to visit the GP, practice nurse, a counsellor, chiropodist, dentist, optician, or alternative medical worker, or to contact NHS Direct for advice. Conversely, more of the Gypsies and Travellers had spoken to health visitors, social workers and midwives (all of whom are likely to make home-based visits) and more had made use of Accident and Emergency services.

Aspinall and Watters (2010) have reviewed the evidence on access to GP services among asylum seekers and summarise the situation as follows:

"There is now an extensive evidence base on the difficulties experienced by asylum seekers in accessing GP treatment. The Joint Committee reported the following problems: the difficulties experienced in registering with a GP (the burden of documentation required to prove address and/or identity, including lack of address for rough sleepers or those in very temporary accommodation); unwillingness to

register asylum seekers for time/resource reasons; eligibility mistakes made by receptionists and others in GP surgeries; and a shortfall in the availability of interpreting services. One of the consequences of these difficulties is an increased reliance on accident and emergency services as a substitute, resulting in increasing healthcare costs and pressure on A and E *services. A large number of research studies have documented similar difficulties.*" (pg20)

Focusing on some of the primary healthcare interventions that relate to CVD and cancer - the morbidities of focus in the EMF - there is also evidence of some important ethnic differences. For instance, the Association of Public Health Observatories 2005 report on ethnicity and health (APHO, 2007) estimated the number of people by ethnic group and sex who have attended NHS Stop Smoking Services and set a quit date (using quit data for 2002-3 and 2003-4) per 1,000 current smokers (based on data from the GHS), and found that Asian, Black and Mixed minority populations had lower rates of setting a smoking quit date for both males and females than the majority White group. Females were found to be more likely to set a quit date than males in every ethnic group. The report also noted that though monitoring of smoking cessation by ethnic group is important it is currently hampered by a lack of local reliable data on smoking prevalence. The report suggests that *'Primary Care Trusts and other NHS organisations may not have been able to identify differences in utilisation rates by ethnic group and to address these differences during the development of the service'* (p34). White et al. (2006) found in their qualitative study of Bangladeshi and Pakistani adults in Newcastle that despite high levels of motivation to stop smoking few participants had sought advice from health professionals or received cessation aids or support. Participants perceived services unfavourably and identified cultural and language barriers to access.

Screening services are an important part of efforts to reduce cancer mortality and differential uptake of screening tests by ethnicity is a cause for concern. Several studies have documented lower levels of breast and cervical cancer screening among women from minority ethnic groups, particularly South Asians (Hoare, 1996; Sutton et al. 1994; Szczepura, Price and Gumber ,2008). Szczepura et al. (2008) examined breast and bowel cancer screening and found that despite some improvement over time, there were persistent disparities between South Asian groups and Whites that were not explained by socioeconomic differences. There is some evidence, however, that rates of cervical cancer screening are high among Black Caribbean women (Szczepura, 2005). Robb et al. (2008) explored attitudes and behaviours in relation to colorectal cancer screening and found that though intentions to screen were similarly high across all ethnic groups (at around 80%), actual screening was considerably lower among Asians (54%) compared to Whites (69%) and Blacks (80%). The authors could not explain these differences in terms of socioeconomic status, poorer health or 'fearful or fatalistic' attitudes. Szczepura (2005) also reported that early data from the colorectal screening programme in the UK suggested very low uptake among South Asian people and suggested that '*the introduction of CRC screening in the UK will represent a major challenge in terms of ensuring equitable access for BME populations*' (p146).

Aspinall and Watters' (2010) review of health among asylum seekers and refugees reported that "*When considering preventative healthcare, low rates of cervical screening have been reported in many asylum seeker/refugee communities. Of the three studies identified in a systematic review, uptake was very substantially lower than that found in the general population. Similarly, very few studies of asylum seekers and refugees report rates of breast screening, the two studies identified suggesting a pattern of very low uptake."* (p27)

There are also doubts that the NHS Health Check Programme, that is aimed at detecting risk of cardiovascular disease early on and is currently being rolled out to GP practices, will successfully engage minority ethnic people (Patel et al., 2009).

A number of studies have highlighted the lower levels of awareness and poor access to health-promoting information among minority ethnic groups. While this in part relates to language barriers, obstacles to gaining access to the necessary information to make informed decisions do not appear to be confined to non-English speakers (Allmark, et al., 2010; Hawthorne et al. 2008; Waller et al., 2009; Chauhan et al., 2010) Clearly there are multiple routes through which individuals may access health-related information, and preferences for particular modes of communication will vary between groups of people. There is some evidence that people from minority ethnic backgrounds, particularly those who have low levels of literacy and

English language competency, prefer to receive information via direct inter-personal communication rather than in written form or via the telephone, for instance (Allmark, et al. 2010). Given the poor provision of interpreting services and low levels of cultural competence of many healthcare providers (discussed more below) this may often result in inadequate receipt of information.

Turning now to look at secondary care, there is evidence from several local studies that minority ethnic patients may be less likely to be referred for follow-up services (Gillam et al., 1989). Nazroo et al. (2009) found significantly lower levels of hospital utilization (out- or day-patient visit in the last year) among Indian, Pakistani, Bangladeshi and Chinese respondents, though the reasons for this could not be elucidated from the survey data analysed. Particular issues face asylum seekers who need secondary care. Aspinall and Watters (2010) have provided a summary of the current situation with respect to entitlement to free secondary care for asylum seekers, failed asylum seekers, undocumented migrants and victims of human trafficking. The situation is complex and emergent. There are persistent concerns that a lack of clarity on the ground is leading to the withholding of essential care in a minority of cases. Confusion is a serious source of concern for practitioners as well as those seeking healthcare.

Looking at services that relate specifically to CVD, there is some evidence of differential access to hospital and follow-on treatments. Sekhri et al.(2008) concluded that at an early stage after presentation with suspected angina, coronary angiography is underused in South Asians (as well as in older people, women and people from deprived areas). Not receiving appropriate angiography was associated with a higher risk of coronary events in all groups. Uptake of cardiac rehabilitation is also lower among minority ethnic groups, women and those from lower socioeconomic backgrounds (Bethell, Lewin and Dalal, 2009). People who do not speak English face particular barriers and there is limited provision of culturally appropriate cardiac rehabilitation services (Astin and Atkin, 2010).

A further area of particular concern relates to maternity care for asylum seeking women and some other new migrants. Aspinall and Watters (2010) conclude that "*there does now appear to be robust evidence that pregnant asylum seekers are* *experiencing barriers to accessing maternity services, even when they are eligible for such care. This may be a particular difficulty for failed asylum seekers, arising from the confusion among healthcare professionals about eligibility."* (p26)

Effectiveness and outcomes:
Greater access to services is not necessarily associated with better health outcomes for minority ethnic patients, though available evidence is complex and somewhat contradictory. Poorer intermediate outcomes for minority ethnic patients with diabetes have been found in a number of local-level studies (Millett et al. 2007; Gray et al. 2007; Fischbacher et al., 2009; Soljak et al., 2007).

However, analyses of the national HSE data by Nazroo et al. (2009) that explored outcomes of care for three chronic conditions: hypertension, cholesterol and diabetes, produced more positive findings. For each condition, respondents were assessed on (i) whether they had the condition (on the basis of clinical tests performed by a nurse during the survey), (ii) whether they were diagnosed (based on self-reports of whether a doctor had told them they had the condition and on examination of medications) and (iii) whether the condition was controlled (based on the clinical tests). This enabled four alternative codes to be generated: no disease/condition; uncontrolled condition; controlled condition; and undiagnosed condition. Multinomial regression explored the relative risk ratios for being in the uncontrolled and undiagnosed categories compared with the controlled category and found very few differences. Treatment and diagnosis of hypertension appeared to be as good among the minority ethnic groups as the White group, while Indian, Pakistani and Bangladeshi respondents seemed to have better quality of cholesterol care than the White group. Results for diabetes were less robust due to small numbers, but again suggested few differences. However, Pakistanis were found to have a higher risk than Whites for ‘uncontrolled diabetes’ and Black Caribbeans to have a higher risk of ‘undiagnosed diabetes’.

Two areas where there are particular concerns about differential effectiveness and adverse outcomes for people from minority ethnic groups are mental health services and maternity services.

A recent review of the literature on the quality of mental health services received by people of minority ethnic background by Newbigging et al. (2007) summarised the situation as follows:

"Research has shown that African and Caribbean men comprise a social group that experience particular difficulty accessing appropriate mental health services and support. In particular, they are under-represented as users of the enabling services and over-represented in the population of patients who are admitted to, compulsorily detained in, and treated by mental health services. Studies have demonstrated the experience and expectation of racist mis-treatment by mental health services alongside disproportionate admission and detention that discourages early access. Under-utilisation of services has also been identified as an important factor in poor outcomes in African and Caribbean communities."

The results of the 2009 Count Me In Survey - an annual census of inpatients in mental health and learning disability services in England and Wales - confirmed the persistent inequalities in the quality and type of care received by some minority ethnic people within the mental health services (Browne and Lim, 2008; Healthcare Commission 2007). The survey illustrated that despite government targets, detention rates remain significantly higher than average among Black Caribbean, Black African and Other Black groups. More detailed studies also highlight persistent inequalities in quality of care for Black groups (McLean, Campbell and Cornish, 2003).

Aspinall and Watters (2010) have also highlighted the inadequacy of mental healthcare for asylum seekers and refugees:

"The provision of mental health services for survivors of torture and organised violence is widely regarded as inadequate for the needs of asylum seekers and refugees. Estimates of the proportion of asylum seekers who have been tortured vary from five to 30 per cent, local studies reporting that injuries caused by persecution and torture are one of the most frequent issues raised among asylum seekers. The Scrutiny Report on Access to Primary Care in London indicated that to meet mental health needs adequately, PCTs would have to increase their allocation two- or three-fold. … training of health workers - has been identified as an important

need by both asylum seekers and professionals, especially in relation to mental health, understanding the asylum system and cultural awareness."(p31)

Similarly, Goward et al. (2006) have highlighted the need for significant changes in mental health services if the needs of Gypsies and Travellers are to be adequately understood and addressed.

As reported above, there is evidence that maternal mortality rates are higher among some minority ethnic groups than White British people and that Black African and Black Caribbean women are most at risk. Poor quality of maternity care is implicated in these stark ethnic inequalities (Lewis 2007). A recent study by Raleigh et al. (2010) based on a large-scale survey of recently delivered women reports some important ethnic inequalities in maternity care including: women from all ethnic minority groups except for the Mixed group were less likely than White British women to say they received adequate pain relief during labour and birth, had complete confidence and trust in staff, and were never left alone by doctors/midwives when worried during labour and birth; and they were almost consistently less likely to say they had a postnatal check-up, and that they saw the midwife as often as they wanted after the delivery. These analyses clearly showed that minority ethnic women have poorer outcomes and report poorer experiences across several – though not all – dimensions of maternity care. Bharj and Salway (2008) have reviewed other evidence that documents the poorer experiences and outcomes of minority ethnic women.

These findings of poorer healthcare outcomes link closely to patient experiences, the appropriateness of service provision and provider competencies.

Patient experiences, cultural competence and discrimination:

We follow Atkinson et al. (2001) and Szczepura (2005) in regarding equitable access as extending beyond simply service uptake to include access to appropriate information, services that are timely and sensitive to individual needs, being able to use services with ease and having confidence that you will be welcomed and treated with respect. Insensitivity and inappropriateness in healthcare provision is not only a concern in its own right, but is likely to contribute to health inequalities both by leading to sub-optimal care (for instance due to poor communication and poor adherence to treatment) and by undermining the mental wellbeing of patients through being stressful. In some cases there is evidence of direct racist discrimination against patients of minority ethnic background by healthcare providers, but more often the evidence suggests that ignorance, stereotyping and uncertainty compound to produce poor patient experiences (Kai et al., 2007). A lack of confidence and competence at individual practitioner level is (re)produced by wider structures that fail to provide the necessary training, resources and environment within which 'cultural competence' is expected and rewarded. Few interventions aimed at raising cultural competence have been evaluated with any rigour (Bhui et al. 2007; Mir and Tovey 2002).

As noted above, numerous surveys and detailed qualitative studies have documented higher levels of dissatisfaction with health services among minority ethnic patients than the White majority in a variety of service contexts. Levels of reported satisfaction appear to be particularly low among Pakistani, Bangladeshi and Chinese people (Department of Health 2009; Chau and Yu 2009; Chau, Yu and Wai 2009).

We briefly discuss here three broad and inter-related ways in which the delivery of health services appears to undermine the health and healthcare experiences of many people from minority ethnic groups: failure to understand and accommodate specific cultural preferences; failure to put in place effective communication; and discriminatory attitudes and behaviours that directly compromise care and cause significant levels of distress among patients and their carers.

There is evidence to suggest that the failure of services and individual practitioners to understand and accommodate patients' cultural and religious beliefs, preferences and behaviours does, in some cases, lead to sub-optimal care and may exacerbate levels of ill-health. Perhaps the most commonly cited example relates to the provision of same-sex providers and single-sex facilities that some women from some minority ethnic groups regard as essential. Mir and Sheikh (2010) found evidence of Pakistani women suffering severe humiliation when being forced to accept care from male health professionals as well as opting not to take up recommended exercise programmes when those on offer were of mixed sex. The importance of same-sex provision had also been noted among Gypsy and Traveller groups (Parry et al., 2004). We discuss several more examples of how culturally inappropriate models of service delivery may compromise quality of care in Chapter 9 on Religion & Belief.

Poor provider-patient communication is another area that has received significant attention. Inadequate access to interpreting services and translated information is a widespread problem for many people of minority ethnic background (Gerrish et al. 2004; Davies and Bath 2002; Bulman and McCourt 2002), particularly those who are recent migrants and older people (Aspinall and Waters, 2010; Allmark et al., 2010). However, it is important to recognise that communication can also be poor even when patients do speak English. This is very clearly illustrated by the experiences of Gypsies and Travellers who frequently experience very poor communication with health providers (Goward et al., 2006; Parry et al., 2004). Effective communication can be hampered by: real and perceived cultural barriers, lack of provider confidence, lack of patient empowerment and rushed consultations (Mir 2008). Parry et al. (2004) describe the situation for Gypsies and Travellers as follows:

'Communication difficulties with health staff are common, particularly where the professional does not understand Gypsy Traveller culture. Poor literacy increases the lack of confidence. This, and fear of being scorned for ignorance, makes it more difficult to ask for clarification when explanations from health professionals are not understood. These difficulties appear to contribute to reduced compliance with prescribed treatments.' (pg 61)

A further important dimension of the health system's contribution to ethnic health inequalities relates more generally to the way in which people of minority ethnic status are received and treated by actors within the health system. A prevalent theme in research studies is that ethnic and religious minorities feel unwelcome and isolated from services and that some providers are dismissive and disrespectful in general terms (Bharj and Salway 2008; Worth et al. 2009) Providers have been found to hold preconceptions and negative stereotypes about the characteristics and preferences of particular minority ethnic and religious groups, in some cases leading to the withholding of particular interventions or treatments (Mir and Sheikh 2010; Chowbey, et al. 2008; Davies et al. 2009).

Several authors have argued that the healthcare system reflects and reinforces the discriminatory attitudes towards minority religious and ethnic communities in wider society (Atkin and Rollings, 1993). It is suggested that the constellation of services and the behaviour of providers impacts upon the health and wellbeing of minoritised people not only via sub-optimal care, but also importantly via the reinforcement of a sense of being devalued and having low social status and associated stress (Mir and Sheikh, 2010). In this way, the experiences of minority ethnic people within the health service can be seen to add to the experiences of discrimination and exclusion in other aspects of their life.

Wider society: inclusion, exclusion and racism

In a review in 2004, Aspinall and Jacobsen noted the widespread neglect of the impact of racial discrimination and racism on health and healthcare disparities across ethnic groups and suggested that this should be a key area of enquiry. Recent years have seen a growing number of studies in this area, particularly by Saffron Karlsen and James Nazroo.

Assessing the impact of racism on health, and the extent to which racism can explain excess ill-health at group level, is complex (Karlsen and Nazroo, 2006; Paradies, 2006). Nevertheless, a growing body of evidence suggests that the direct and indirect effects of racism on the health of minority ethnic people may be substantial.

Qualitative studies and quantitative surveys have documented the high levels of interpersonal discrimination experienced by people of minority ethnic identity. Nazroo (2003) summarised the evidence from qualitative studies as follows:

"*Qualitative investigations of experiences of racial harassment and discrimination in the United Kingdom 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"* (p281).

There is also evidence that many people of minority ethnic background (as well as the majority White British population) perceive there to be widespread differential treatment and opportunities based on ethnic identity in UK society. Analyses of data from the 2005 Citizenship Survey (Becares, Stafford and Nazroo, 2009) show that 51% of Bangladeshi people were fairly or very worried about racial attack, with the figures being 47% among the Indian group, 48% among the Pakistani group, 28% among the Black Caribbean group and 44% among the Black African group. The same study showed that around 40% or higher of respondents from each of the minority ethnic groups reported that they 'expected to be treated worse than other 'races' ' in a range of public sector settings. This study also highlighted some important variations within and between ethnic groups in the level of experienced and perceived discrimination. For instance, fear of racial or religious attack was significantly higher among women than men.

Evidence suggests that the experience of racism is particularly extreme for Gypsies and Travellers (Parry et al. 2007; Goward et al. 2006; Van Cleemput et al. 2007). Parry et al. (2004) reported that for the respondents in their qualitative interviews:

'The experience of racism and negative stereotyping was pervasive and was automatically anticipated as a result. Most described a feeling of complete rejection by society. There was conflict between pride in identity and a felt need to hide identity to avoid discrimination. Prior experience and expectation of racism was closely associated with mistrust of non-Travellers in general that leads to defensive hostile behaviour and avoidance of unnecessary encounters with non-Travellers.' Parry et al., pg 52)

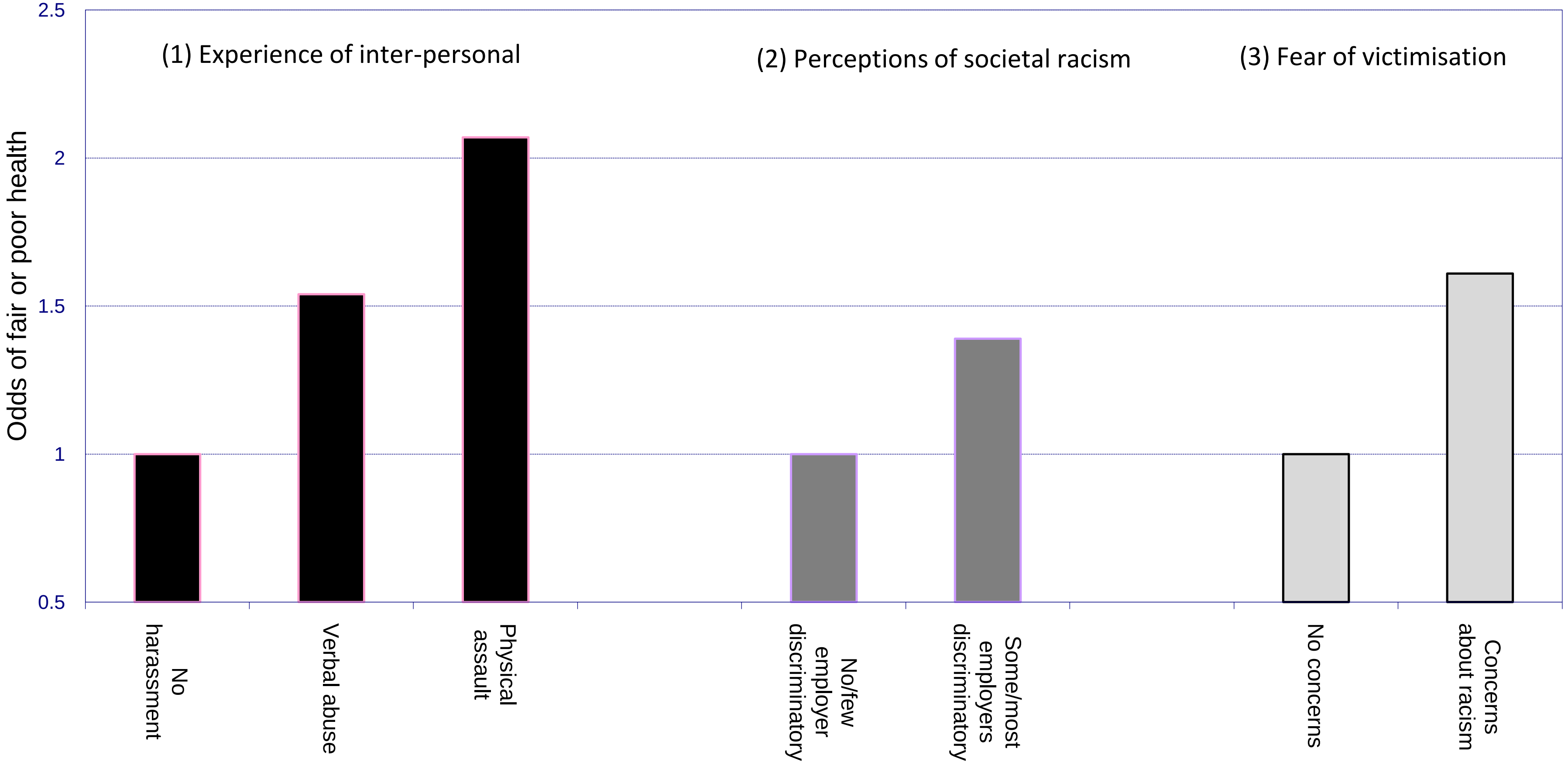
Importantly, respondents in Parry et al.'s (2004) study felt that societal discrimination and exclusion had not improved over time and some that it had got worse and impacted on many aspects of life including education, accommodation and healthcare.

Aspinall and Watters (2010) report on work that documents the significant levels of racial hostility that asylum seekers and refugees experience.

In recent years a number of studies have been published that document the association between the experience and/or perception of racial discrimination and prejudice and poorer health (Karlsen and Nazroo, 2009; Becares, Stafford and Nazroo, 2009; Bhui et al., 2005; Karlsen et al., 2005; Karlsen and Nazroo 2004). We reproduce some of these findings in Figure 9 and Table 29 below. Figure 9 illustrates that, among all minority ethnic groups combined, the odds of reporting fair or poor health are significantly elevated among people who report (1) direct experience of inter-personal racism, (2) a perception that employers discriminate on the basis of ethnic identity, and (3) fear of racial/religious victimisation.

Table 29 shows the associations between indicators of experienced and perceived racial discrimination and two mental health outcomes: common mental disorder (CMD) (anxiety disorder or depression) in the previous week and an estimate of the annual prevalence of psychosis. These findings are adapted from work by Karlsen, Nazroo and colleagues (2002, 2004 and 2005). The presence of CMD was assessed using the Revised Clinical Interview Schedule (CIS-R), which asks about the presence and severity of fourteen non-psychotic psychiatric symptoms during the week prior to interview; with a case threshold of ≥12 (Lewis et al. 2009). Risk of a psychosis diagnosis was assessed at the individual level on the basis of responses to the Psychosis Screening Questionnaire (PSQ), which screens for symptoms commonly found in psychotic disorders (Bebbington and Nayani, 1995). Estimated annual prevalence of psychosis in each ethnic population was then calculated using an algorithm based on the PSQ scores at the individual level (Nazroo and King, 2002). Figures in bold indicate a statistically significantly elevated risk among people who report experience or perception of racial discrimination. Personal experience of racial harassment shows a positive association with CMD across all groups except Bangladeshis and a positive association with psychosis among three of the five groups.

Figure 9: Odds of reporting fair or poor health by indicators of experience or perception of racial discrimination, all non-White ethnic groups combined, England 1993/4



Source: FNSEM 1993/4; Adapted from Karlsen and Nazroo (2002, 2004)

Table 29: Standardised odds ratios for associations between estimated weekly prevalence of CMD, estimated annual prevalence of psychosis and indicators of racism, all minority ethnic minority groups combined.

	Irish	Caribbean	Bangladeshi	Indian	Pakistani
Estimated weekly prevalence of CMD					
Racial harassment					
none	1.00	1.00	1.00	1.00	1.00
verbal or physical	**2.86**	**2.03**	1.51	**2.70**	**2.21**
Employment-related discrimination					
No	1.00	1.00	1.00	1.00	1.00
Yes	2.12	**2.08**	3.52	**2.17**	1.15
British employers are racist					
None/ A few	1.00	1.00	1.00	1.00	1.00
About half/ More than half	**2.71**	1.37	1.84	1.02	1.38
Estimated annual prevalence of psychosis					
Racial harassment					
none	1.00	1.00	1.00	1.00	1.00
verbal or physical	2.26	**3.45**	**7.83**	2.16	**3.36**
Employment-related discrimination					
No	1.00	1.00	1.00	1.00	1.00
Yes	0.79	1.40	0.90	1.40	2.23
British employers are racist					
None/ A few	1.00	1.00	1.00	1.00	1.00
About half/ More than half	1.07	**2.34**	1.12	0.74	1.01

Source: EMPIRIC 2000 adapted from Karlsen,S., et al. (2005)
Note: Standardised for age, gender and socioeconomic status. Bold figures indicate statistical significance.

Clearly, the effects of racial discrimination on health must also be traced via the poorer socioeconomic conditions and social status enjoyed by minority ethnic people, as we have described above. Nazroo (2003) has summarised the key role of racism as follows:

"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 influence 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 socioeconomic differences between ethnic groups should not be considered as somehow autonomous (which is a danger of an approach that attempts to examine the extent to which socioeconomic differentials "explain" ethnic differentials in health). …while the postwar migration of ethnic minority people into the United Kingdom was driven by a shortage of labor, this process and the socioeconomic disadvantage faced by ethnic minority migrants was, and continues to be, structured by a racism that has its roots in colonial history" (p282)

It is important also to note that, though minority ethnic identities may imply a sense of belonging and pride, the perception that minority ethnic communities are somehow better endowed with networks of support and that extended families ensure that the ill and needy are well cared for without the need for statutory services, have been firmly refuted (Atkin and Rollings, 1992). Evidence from the HSE 2004 shows that all minority ethnic groups were more likely to report low levels of social support than the general population. The risk ratios of reporting severe lack of support, compared with men and women in the general population, were higher for men and women in all minority ethnic groups except Irish (Sproston and Mindell, 2006b). A more detailed study by Salway et al. (2007a) also highlighted significant levels of isolation and low social support among some minority ethnic people with chronic illness, particularly Black African women. Recent work by Williams et al. (Williams et al., 2009) illustrates the higher levels of psychosocial stress experienced by South Asian populations when compared with White people linked to the intersection of low levels of social support, financial strain, residential crowding, family conflict, social deprivation and discrimination. The authors suggest that these risk factors for cardiovascular disease deserve fuller investigation.

Exclusion from the evidence base

A final factor that undoubtedly contributes to poorer health and healthcare outcomes for minority ethnic groups is the paucity of high quality research evidence that is inclusive of minority ethnic populations. The requirement for researchers to generate an evidence base that reflects the needs of our ethnically diverse population has been formally acknowledged by the Department of Health in its Research Governance Framework for Health and Social Care in which it sets out a number of general principles that should apply to all research (Department of Health 2001/2005):

'Research, and those pursuing it, should respect the diversity of human society and conditions and the multi-cultural nature of society. Whenever relevant, it should take account of age, disability, gender, sexual orientation, race, culture and religion in its design, undertaking and reporting. The body of research evidence available to policy makers should reflect the diversity of the population' (Para 2.2.7)'

Despite this directive, a majority of health research still fails to engage with ethnicity. A number of factors appear to have contributed to this inadequate attention including: a lack of awareness of the potential significance of ethnicity; a tendency to consider ethnicity as a specialist area of investigation; conscious exclusion of minority ethnic individuals on the grounds of added cost and complexity; and a lack of researcher confidence and skills to engage with individuals from ethnic groups that are perceived to be 'hard-to-reach'. At the same time, growing awareness of past abuses and negative experiences of research may also make individuals from minority ethnic groups reluctant to participate in research (Salway and Ellison, 2010). Furthermore, though interest in ethnicity and health is growing in the UK and elsewhere there are concerns regarding the *quality* of this research, its potential to inform changes in policy and practice that benefit minority ethnic populations, and its potential role in stereotyping and stigmatising minority ethnic populations (Salway et al., 2009).

The present lack of high quality evidence has several implications:

- Evidence generated through studies of the majority White British population alone may not necessarily be applicable to other ethnic groups and this may mean differential patterns of diagnosis, treatment and outcomes for minorities. For instance, minority ethnic patients may be less likely to 'fit' the criteria for certain diagnoses or prescriptions. Bhui et al. (2008) found that in their examination of the clinical records that related to people who had committed suicide within 12 months of contact with mental health services, some widely accepted suicide risk indicators were less common in the minority ethnic groups than in the White group. Immediate risk of suicide was perceived by the clinicians to be highest among White people, suggesting that indications of risk were not effectively identified for some minority patients via the established clinical screening procedures.

- Health issues that specifically affect minority ethnic groups are not well researched or are researched in ways that serve to stigmatise and pathologise (e.g. congenital abnormalities in Pakistanis (Modell and Darr, 2002))

- Research is often not framed in ways that address the problems that are of central concern to minoritised populations and may not be conducted in ways that are empowering to those communities. There has been a particular lack of attention to racism and how it can be countered in healthcare settings.

- A lack of research on effectiveness and cost effectiveness of interventions undermines the commissioning of services that are sensitive to the needs of minority ethnic communities. This is particularly the case in the current economic context where all new proposed intervention needs to have a solid business case, or indeed have evidence of cost saving potential.

Researching ethnicity and health raises many complex ethical, theoretical and practical issues and good quality research demands additional resources and particular expertise (for example to work across languages effectively). There is a particular need to develop a more diverse body of researchers working in this area, as well as to increase multidisciplinary and cross-national comparative work.

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