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## Religion and belief

SALWAY, Sarah, HYDE, Martin and KARLSEN, Saffron

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# Chapter 9: Religion and belief

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## Key messages

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

#### *Outcome*

#### LIFE

- Data are not currently available for any of the Life indicators by religion/belief for England, Scotland or Wales.

#### HEALTH

#### *Outcome*

- 2001 Census data for all people for Great Britain as a whole reveal large differences in self-reported health between religious groups. Among males, the age-standardized percentage of people reporting not good health was highest among Muslims (12.8%) and those reporting 'Any other religion' (12.2%) and lowest among Jewish males (6.5%). Among females, the highest percentage was again among Muslims (16.1%) with the percentage among Sikhs (13.8%) and 'Any other religion' (13.7%) also being high, and lowest again among the Jewish group (6.9%).
- 2001 Census data for Great Britain also show that the prevalence of limiting long-term illness and disability (LLTI) varies between religious groups. Age-standardized rates of LLTI for all people for Great Britain as a whole were highest among Muslims for both males (21.4%) and females (24.3%), though males and females reporting 'Any other religion' and also Sikh females, had high rates. Jewish males (12.6%) and females (12.8%) were the least likely to report an LLTI when age standardized rates were compared. Levels of poor health and LLTI among Muslims appear to be particularly high in comparison to other religious groups in the middle age-range (30-74 years).



- Health Survey for England (HSE) 2004 data for people aged 16+ years show broadly similar differentials, with Muslim and Sikh men and women standing out as having the highest prevalence of not good health and LLTI.
- Available evidence does not suggest significant and systematic differences in indicators of common mental disorder, such as GHQ12, between religious groups.

### *Process*

- Though studies that have focused in detail on religion are limited, there is evidence from a number of service settings that NHS services in England, Wales and Scotland frequently struggle to deliver religiously sensitive care.
- National level data on treatment with respect are limited, but there is some evidence that people of minority religion, and particularly Muslims, are less likely to report that they feel they are treated with respect in healthcare than are Christians. A number of rigorous qualitative studies support this picture, with common themes including: feelings of exclusion, dismissiveness and lack of engagement with professionals.
- Some particular religiously based health needs are not currently, routinely accommodated by the NHS, such as male infant circumcision and the desire to avoid porcine or alcohol derived drugs.
- There are some significant religious differences in indicators of healthy lifestyle, however, patterns vary within religious groups along ethnic lines as well as by sex. Key patterns include: very low prevalence of alcohol consumption among Muslims; low prevalence of smoking among Sikhs; low levels of physical activity among all religious groups but particularly low levels among most minority religious groups; high levels of obesity/overweight among all religious groups but particularly high levels among several minority religious groups especially among women.

### *Autonomy*

- Patient choice and preferences that are shaped by religious beliefs and practices are not always well accommodated e.g. preference for same-sex providers.
- Spiritual care may often be lacking in NHS settings for followers of minority religions. This may be a particular issue in relation to end-of-life care and bereavement.

### *Vulnerable groups:*

Older Muslim and Sikh women, particularly those with poor English language skills, appear to suffer heavy burdens of ill-health, disability and also caring responsibilities. These women are also often in a weak position to negotiate religiously-appropriate support from statutory services.

## **Are there any emerging trends?**

- The concerning rise in Islamophobia in recent years has been expressed within the health sector as in other arenas. The negative health consequences of victimisation suggest this trend may exacerbate the health disadvantage facing Muslim groups.
- Since the exploration of health experiences and outcomes by religion is in its infancy in the UK, it is difficult to identify trends or changes over time. However, the increasing interest in religion as a factor shaping health and life chances is bringing new issues to the fore.

## **What are the causes?**

- Though religious and ethnic identities are closely inter-related, religion may nevertheless have distinct implications for health experiences and outcomes.

Religion also demands particular responses from policies and services that are intended to protect and promote life and health. There is evidence to suggest that increasing numbers of 'minority' individuals identify strongly with religious affiliations, particularly among UK-born minority ethnic populations.

- The following factors all appear to shape health outcomes by religion, though we know little about how important each of these is in relation to explaining inequalities in health: socioeconomic status and deprivation; discrimination at societal level; unresponsive and inappropriate health service provision; religiously informed patterns of behaviour and life-style choices; and networks of association and support that shape access to information and resources (as well as norms and expectations of behaviour).
- The interplay of discrimination and low economic and social status, operating both within the healthcare sector and in wider society, seems to account for much of the excess health burden experienced by Pakistani and Bangladeshi Muslims. Though the processes linking these structural processes to health outcomes need further explication, it is clear that the major health inequalities between religious groups will not be addressed without attention to the wider social determinants.
- It seems likely that some of the issues that have attracted significant attention, such as the failure of GPs routinely to offer non-porcine derivative drugs, may be important breaches of patient choice (and possibly infringement of human rights). However, these are unlikely to account for the large inequalities in health status observed between religious groups.
- Some aspects of routine healthcare may seriously undermine the health status of some religious minorities - such as the failure to routinely offer Muslim patients with diabetes adequate advice and support to enable them to manage their disease and safely fast during Ramadan.
- There is also evidence that discriminatory behaviour of some health providers may result in poor quality care and poor health outcomes for some patients

and that religious identities and perceptions of religious difference (often inter-related with ethnic 'otherness') underlies such discrimination in some contexts. Available evidence largely relates to the experiences of Muslims.

## **Data quality and quantity**

- Until recently there has been little exploration of health and life indicators by religion or belief in England, Scotland or Wales. However, there is increasing interest among health researchers in this aspect of identity and its potential role in shaping health outcomes and inequalities.
- Information on religion is not collected at death registration, nor is it routinely collected in health service statistics in primary or secondary care.
- The inclusion of a voluntary question on religion in the 2001 Censuses of England, Wales and Scotland has provided a general picture of the health status of Britain's religious groups.
- In terms of national surveys, the Fourth National Survey of Ethnic Minorities 1993-4 yielded some useful data on health status by religion, but these data are now rather old. The Health Survey for England in 1999 and 2004 included ethnic minority boost samples (unlike other years). Though the focus of these surveys was ethnicity, they did collect information on religion and do allow some exploration of health across the largest religious groups.
- Clinical studies and local level data rarely collect and report health outcomes by religion or belief.
- In the absence of data on religion, information recorded by ethnicity can be informative for some groups such as Pakistani and Bangladeshi Muslims, but most ethnic groups are religiously diverse.

- A number of special studies have explored religion and belief in relation to health experiences and outcomes, but these have predominantly focused on a limited number of issues where faith has been assumed to play an important role – such as end-of-life care, organ donation and prenatal counselling.
- Though data are limited across the board, more attention has been given to the largest religions and particularly the religious needs of South Asian Muslims, than to other religious groups. There has been little exploration of other aspects of belief or variations in the meaning of religion in people's lives.
- To-date there has been little exploration of the important interplay between ethnic and religious identities in present-day UK in relation to health. Even where information is collected on both ethnicity and religion, datasets often do not yield sufficient numbers to allow breakdown into religio-ethnic<sup>1</sup> groups which may be the most meaningful in terms of describing and understanding health outcomes.

### **How might inequalities and change over time be better measured?**

- There is a need for the establishment of standard codes and procedures for recording religion in routine health datasets.
- There is a need for precision and justification in the use of religious categories and labels. For instance, the term 'British Muslim' is sometimes used to refer to studies that have focused exclusively on Pakistanis, the findings from which may not be relevant across the whole, diverse range of Muslim experience in the country.
- As with ethnicity, 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

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<sup>1</sup> We use the terms religio-ethnic and ethno-religious interchangeably to refer to 'groups' of people identified by a combination of their self-reported religion and ethnic identity, e.g. Pakistani-Muslim.

religion can be a proxy for multifarious factors that may impact upon health. More detailed surveys and qualitative studies are needed that can generate information about religion that takes account of its multi-dimensional nature and diverse links to health.

- There is a need for data generating approaches that allow the exploration of the interplay between ethnic and religious identities. There is a need to be able to disaggregate indicators by ethnicity, religion and also religio-ethnic group in order to be able to identify trends and to understand the interplay of these two dimensions of diversity and inequality. A focus on either one in isolation is likely to produce a partial picture and risk the conflation of distinct influences on health and life. Many studies of minority ethnic health, particularly those focused on South Asian populations, include some attention to religion but there is often a tendency to conflate ethnic and religious identities. There has not to-date been any detailed exploration of how these factors inter-relate to shape health experiences and outcomes.
  - Efforts to monitor and understand health patterns by religion must extend beyond the Muslim population, or the largest religious groups, to include smaller minority religious groups and other aspects of belief.
-

## Evidence: Data quality and quantity

Until recently there has been little exploration of health and life indicators by religion or belief in England, Scotland or Wales. However, there is increasing interest among health researchers in this aspect of identity and its potential role in shaping health outcomes and inequalities.

Information on religion is not collected at death registration. Nor is information on religion routinely collected at primary care level or in secondary care datasets, such as the Hospital Episode Statistics, meaning that opportunities for data linkage are fewer than in the case of ethnicity.

The inclusion of a voluntary question on religion in the 2001 Censuses of England, Wales and Scotland - which was answered by the great majority of people - has provided a general picture of the health status of Britain's religious groups. Tables 1-3 below present the basic distribution of the population of England, Wales and Scotland by religion from the Censuses.

Table 1: Percentage distribution of all people by current religion, England, 2001

	Number	Percentage (%)
Christian	35,251,200	71.7
Buddhist	139,000	0.3
Hindu	547,000	1.1
Jewish	257,700	0.5
Muslim	1,524,900	3.1
Sikh	327,300	0.7
Other religions	143,800	0.3
<i>All religions</i>	38,191,000	77.7
No religion	7,171,300	14.6
Religion not stated	3,776,500	7.7
<i>Total</i>	49,138,800	100

Source: Census, April 2001, Office for National Statistics

Note: Question: "What is your religion?", Numbers rounded to nearest hundred.

Table 1 shows that close to 78% of people in England reported a religion, with around 15% reporting no religion and 8% choosing not to answer the question. While Christians accounted for 92% of all people reporting a religion, Muslims were the second largest group (almost 4% of all those reporting a religion), comprising over 1.5 million people.

Table 2: Percentage distribution of all people by current religion, Wales, 2001

	<b>Number</b>	<b>Percentage (%)</b>
Christian	2,087,200	71.9
Buddhist	5,400	0.2
Hindu	5,400	0.2
Jewish	2,300	0.1
Muslim	21,700	0.8
Sikh	2,000	0.1
Another Religion	6,900	0.2
<i>All Religions</i>		<i>73.4</i>
No religion	537,900	18.5
Not Answered	234,100	8.1
<b>Total</b>	<b>2,903,100</b>	<b>100</b>

Source: Census, April 2001, Office for National Statistics

Note: Question: "What is your religion?" Numbers rounded to nearest hundred.

In the 2001 Census of Wales, the proportion of all people reporting a religion was rather lower in Wales than in England at 73% and the proportion reporting no religion rather higher at 19%. Behind Christians, Muslims were again the largest minority religious group, comprising around 22,000 people.



Table 3: Percentage distribution of all people by current religion, Scotland, 2001

	Number	Percentage (%)
Church of Scotland	2,146,300	42.4
Roman Catholic	803,700	15.9
Other Christian	344,600	6.8
<i>All Christian</i>		<i>65.1</i>
Buddhist	6,800	0.1
Hindu	5,600	0.1
Jewish	6,400	0.1
Muslim	42,600	0.8
Sikh	6,600	0.1
Another Religion	27,000	0.5
<i>All Religions</i>	<i>3,389,500</i>	<i>67.0</i>
No religion	1,394,500	27.6
Not Answered	278,100	5.5
Total	5,062,000	100

Source: Census, April 2001, GRO(S)

Note: Question: "What religion, religious denomination or body do you belong to?" Numbers rounded to nearest hundred.

In the 2001 Census of Scotland, just over two-thirds (67%) of the population reported currently having a religion, far lower than in England or Wales, and 28% reported not belonging to any religion. More than six out of ten people said that their religion was Christian (65%). Just under half (45%) of the non-Christian religious population was Muslim. The next largest non-Christian religious groups were Buddhists, Sikhs and Jews, each comprising around 6,500 people. People who reported a religion other than one listed on the Census form were a significant minority - 27,000 people.

While the Census data provided some broad indicators of health by religious group, health-focused surveys are needed to provide richer detail on patterns of ill-health and health-related behaviours. However, few national surveys that have collected relevant health-related information have had sample designs that allow exploration of religious inequalities. The Fourth National Survey of Ethnic Minorities (FNSEM) 1993-4 yielded some useful data on health status by religion (Nazroo 1997), but these data are now rather old and analyses were constrained by limited sample sizes. The Health Survey for England in 1999 and 2004 had a special focus on

minority ethnic populations and a boosted sample of respondents from minority ethnic groups (unlike the usual representative sample design) and also included a question on religion. However, the standard published reports and tables have not included attention to religious difference in health experiences and outcomes, and the survey was not designed with the explicit aim of producing adequate samples of minority religious groups. Sample sizes are insufficient to explore the health profiles of Buddhists or Jews, but there are reasonable numbers of Muslims, Sikhs and Hindus for some indicative analyses. Furthermore, recent work by Saffron Karlsen and James Nazroo has involved pooling the 1999 and 2004 datasets to allow analyses by religion and ethnicity, and we report on some of these findings below. We have also produced some new descriptive analyses using the 2004 HSE data for the present report, in order to describe some of the EMF indicators by religious group.

The Citizenship Surveys fielded in England & Wales are also a potential source of information on religious patterns in health-related indicators. We therefore performed some exploratory analyses for possible inclusion in this report. However, the numbers are small and do not sustain complex analyses. We report findings from this survey only in relation to patients' reports of being treated with respect in healthcare, since the HSE 2004 is a preferable source of information for the other indicators.

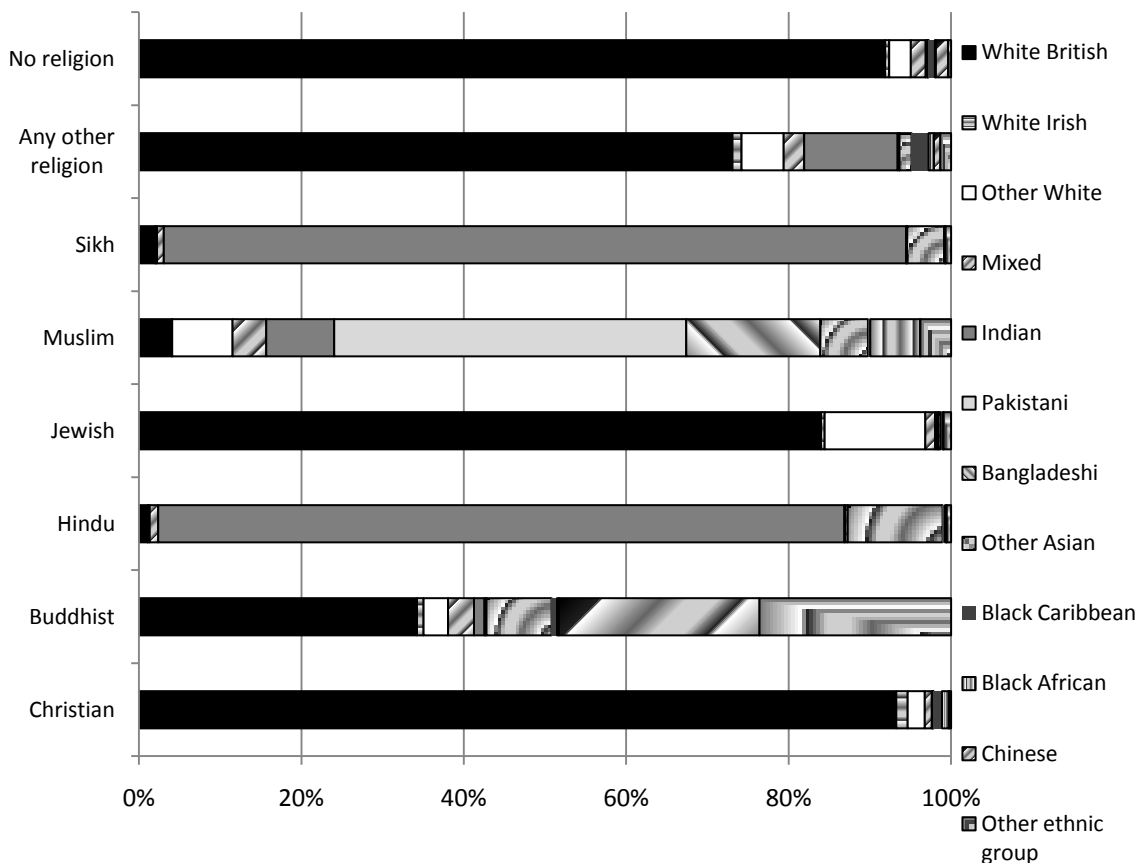
We described these surveys and their usefulness for explorations of health indicators by ethnicity and religion more in Chapter 7 on ethnicity.

Turning to local data and special studies, compared to ethnicity, far fewer health-relevant datasets have to-date included information on religion or belief. For example, Sultana and Aziz interrogated the Directory of Clinical Databases (DoCDat), which is a comprehensive, freely available UK compilation of 162 local and national health datasets (Sultana and Sheikh 2008). They were able to ascertain whether questions on ethnicity and/or religion were included in 132 of these datasets and found that 62 (46%) contained a question on ethnicity and just seven (5%) on religion, all of which used different coding structures. While a number of special studies have explored religion in relation to health experiences and outcomes, these have predominantly focused on a limited number of issues where religious faith and

beliefs has been assumed to play an important role – such as end-of-life care, organ donation and prenatal screening and counselling. Some of these studies have explored aspects of faith, religious belief and religiosity in relation to health experiences and outcomes, but the body of knowledge is limited. We draw on some of these studies in the discussion section of this chapter.

As noted above, religious and ethnic identities are frequently closely inter-related, particularly among some minority ethnic groups in present-day Britain. However, the relationships are varied and have not been explored in any detail within the health arena. Census data has been compiled for the whole of Great Britain by ONS to produce cross-tabulations of ethnicity and religion. We reproduce these data in Figure 1 and Figure 2 below. Looking at Figure 1 it can be seen that some religious categories map quite closely onto ethnic categories. For instance, people reporting themselves as Jewish predominantly self-identify as 'White British' or 'Other White'. Also, in Figure 2 it can be seen that some ethnic groups are fairly homogenous in terms of their religious identity. For instance, people identifying themselves as Bangladeshi or British Bangladeshi are almost uniformly Muslim. However, the religious category Muslim is itself made up of people reporting a number of different ethnic identities. Furthermore, some of the Census 2001 ethnic categories - such as Indian or Black African - include people reporting a variety of religions.

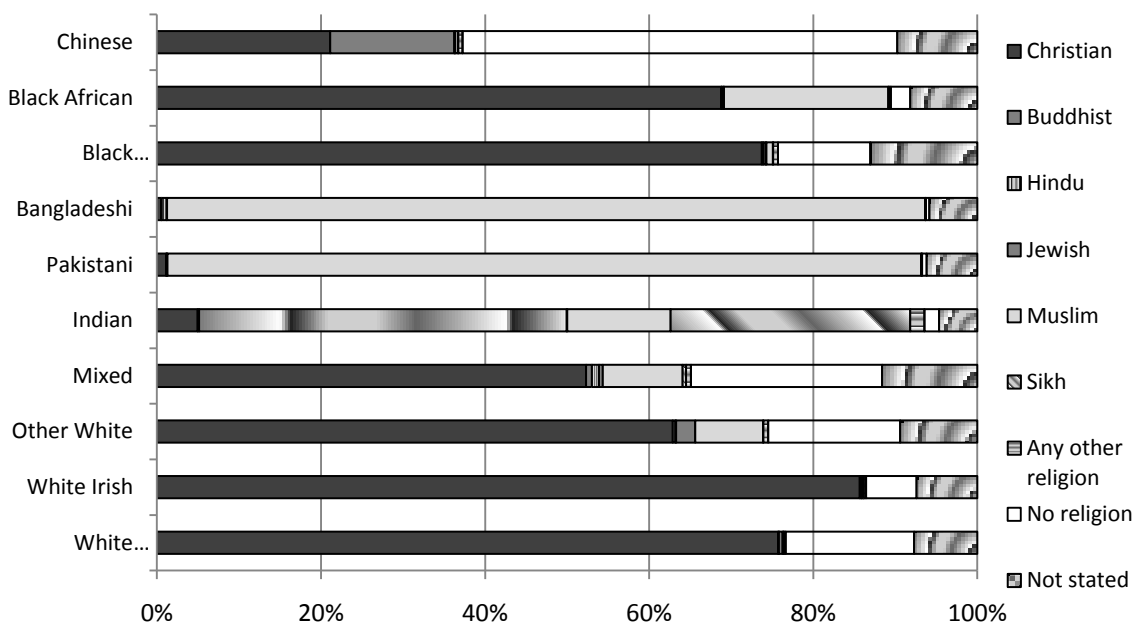
Figure 1: Ethnic composition of religious groups in Great Britain, 2001



Source, Census 2001, Great Britain, ONS

Note: The 'Other Black' group made up 0.05 to 0.4% of each religion group but is omitted for ease of presentation.

Figure 2 : Religious composition of main ethnic groups in Great Britain, 2001



Source, Census 2001, Great Britain, ONS

Note: 'Other Black', 'Other Asian' and 'Other ethnic group' were all religiously diverse, but are omitted for ease of presentation.

Additional detail is available from the report 'Religion in the 2001 Census' for Scotland (Scottish Government<sup>ref</sup>), and this indicates a pattern that is essentially similar to that for Great Britain as a whole. The most ethnically diverse religious group in Scotland, as in Great Britain overall, was those identifying themselves as Buddhists. Just over half (52%) of Buddhists in Scotland reported themselves to be of a White ethnicity. The remainder comprised Chinese (28%), Other Ethnic groups (14%), Other South Asian (4%), Mixed (2%) and Indian (1%).

The ONS has also produced information on the largest ethno-religious groups from the 2001 Censuses and we reproduce these figures in Table 4 below.

Table 4: Largest ethno-religious groups, Great Britain, 2001

	Percentages and numbers			
	Proportion of total population	Proportion of ethnic group	Proportion of religious group	Total population (Numbers)
White British Christian	66.8	75.7	93.0	38,137,200
White British No religion	13.8	15.7	91.8	7,887,00
White British Jewish	0.4	0.5	84.0	224,500
White British Muslim	0.1	0.1	4.0	63,900
White British Buddhist	0.1	0.1	34.2	51,000
White Irish Christian	1.0	85.7	1.4	592,200
White Irish No religion	0.1	6.2	0.5	42,600
Other White Christian	1.6	62.9	2.2	895,700
Other White No religion	0.4	16.1	2.7	228,600
Other White Muslim	0.2	8.3	7.4	117,700
Other White Jewish	0.1	2.3	12.4	33,100
Mixed Christian	0.6	52.3	0.9	352,600
Mixed No religion	0.3	23.3	1.8	157,300
Mixed Muslim	0.1	9.7	4.1	65,600
Indian Hindu	0.8	44.8	84.4	471,500
Indian Sikh	0.5	29.2	91.4	307,100
Indian Muslim	0.2	12.6	8.3	132,600
Indian Christian	0.1	5.0	0.1	52,100
Pakistani Muslim	1.2	91.9	43.2	686,200
Bangladeshi Muslim	0.5	92.4	16.5	261,400
Other Asian Muslim	0.2	37.5	5.8	92,800
Other Asian Hindu	0.1	26.3	11.7	65,200
Other Asian Christian	0.1	13.5	0.1	33,300
Black Caribbean Christian	0.7	73.7	1.0	417,100
Black Caribbean No religion	0.1	11.3	0.7	63,600
Black African Christian	0.6	68.8	0.8	333,500
Black African Muslim	0.2	20.0	6.1	97,100
Chinese No religion	0.2	53.00	1.5	128,900
Chinese Christian	0.1	21.1	0.1	51,400
Chinese Buddhist	0.1	15.1	24.7	36,800
Other ethnic group Christian	0.1	32.8	0.2	75,200
Other ethnic group No religion	0.1	14.0	0.4	32,200
Other ethnic group Muslim	0.1	26.0	3.8	59,700
Other ethnic group Buddhist	0.1	15.3	23.6	35,100
<b>Largest ethno-religious groups</b>	<b>91.56</b>	.	.	<b>52,281,700</b>

Source: Census 2001, Office for National Statistics; Census 2001, General Register Office for Scotland

Note: Eight per cent of respondents chose not to state their religion. The percentage classified as religion not stated was greater in Black and Mixed groups. Numbers rounded to nearest 100.

Clearly, it may be important to differentiate groups of people along both religious and ethnic lines in order to identify important areas of inequality. However, even where data sources collect information on both ethnicity and religion, the datasets often do not yield sufficient numbers to allow breakdown into religio-ethnic groups which may be the most meaningful in terms of describing and understanding health outcomes. Given the importance of also stratifying analyses by sex and age, it is usually not possible to discern differences between religion groups with the currently available data.

It is also worth noting the proportions of people who state that they have no religion within each ethnic group (Table 5), since this varies considerably from over 50% among the Chinese group to less than 1% among the Bangladeshi and Pakistani group. So, it seems likely that the relevance of religion to describing and understanding health outcomes may vary across different ethnic groups. It is important to remember, however, that the Census questions on religion may not have captured dimensions of belief or spirituality that people identify with but which do not fit within the framework of established religions. For instance, King and colleagues found that around 18% of White British and White Irish people, and 16% of Black Caribbean people, reported themselves to have a 'spiritual but not religious' life view (King et al., 2006).

Table 5: Percentage of people reporting no religion: by ethnic group and country of birth, Great Britain, 2001

	Born in UK	Born outside UK	Total
White	15.6	13.8	15.5
Indian	2.4	1.3	1.8
Pakistani	0.7	0.4	0.6
Bangladeshi	0.6	0.3	0.5
Other Asian	5.0	2.9	3.6
Black Caribbean	13.6	8.0	11.5
Black African	3.5	1.8	2.4
Other Black	13.5	7.2	12.5
Chinese	57.9	51.0	53.0
Mixed	26.2	12.6	23.3
Other Ethnic Group	13.4	14.1	14.0
<i>Total</i>	<i>15.5</i>	<i>10.8</i>	<i>15.1</i>

Source: Census, April 2001, Office for National Statistics; Census, April 2001, General Register Office for Scotland

A number of special studies have explored religion and belief in relation to health experiences and outcomes, but these have predominantly focused on a limited number of issues where faith has been assumed to play an important role – such as end-of-life care, organ donation and prenatal counselling (Randhawa et al., 2010; Cobb, 2008; Shaw, 2009; Rozario and Gilliat-Ray, 2006). Furthermore, though data are limited across the board, more attention has been given to the largest religions and particularly the religious needs of South Asian Muslims, than to other religious groups. There has been little exploration of other aspects of belief or variations in the meaning of religion in people's lives.

This highlights a further area in need of development in relation to understanding the links between religion and health - namely the need for theoretical work to more clearly articulate the nature of religious identity and its potential links to health and healthcare experiences. As has been illustrated above, several of the largest religious groups in Great Britain, including Christians and Muslims, are very diverse in terms of ethnic make-up. In many instances therefore, the broad religious categories lack meaning for analyses that aim to describe and understand differentials in health experiences and outcomes. Nevertheless, there may be aspects of health and healthcare for which it is meaningful to examine religious groups - for instance where there is a concern to understand and address the implications of particular religious practices for health status, or where there is evidence that religious identity over-rides other identities in shaping the ways in which healthcare providers treat patients. Religious identities may also inter-relate in complex ways with socioeconomic status and gender, further highlighting the need for conceptual clarity.

Side-by-side there is a need for the establishment of standard codes and procedures for recording religion in routine health datasets. Currently there is a lack of precision and justification in the use of religious categories and labels. For instance, the term 'British Muslim' is sometimes used to refer to studies that have focused exclusively on Pakistanis, the findings from which may not be relevant across the whole, diverse range of Muslim experience in the country.



As with ethnicity, 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 religion can be a proxy for multifarious factors that may impact upon health. More detailed surveys and qualitative studies are needed that can generate information about religion that takes account of its multi-dimensional nature and diverse links to health.

Finally, efforts to monitor and understand health patterns by religion must extend beyond the Muslim population, or even the largest religious groups, to include smaller minority religious groups and other aspects of belief.

## **LIFE: main indicators**

The following LIFE indicators are not currently available for different religious groups.

- Period life expectancy at birth, ages 20, 65 and 80
- Infant mortality
- Cause-specific mortality – Cardiovascular disease and cancer
- Suicide
- Accidental mortality, assault and injury
- Deaths in institutions

## **HEALTH: main indicators**

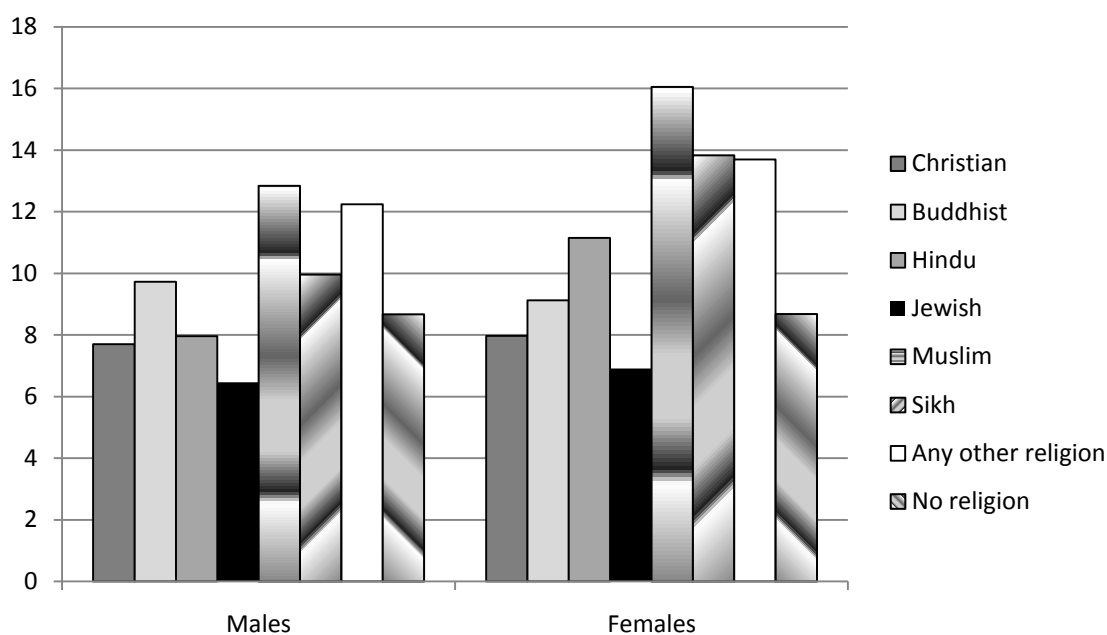
### **Outcomes**

#### ***Self-reported general health***

##### *Percentage of people reporting not good health: 2001 Census data*

We present first the aggregate data for all people for the whole of Great Britain from the Censuses of 2001. Among males, the age-standardized percentage of people reporting not good health was highest among Muslims (12.8%) and those reporting 'Any other religion' (12.2%) and lowest among Jewish males (6.5%). Among females, the highest percentage was again among Muslims (16.1%) with the percentage among Sikhs (13.8%) and 'Any other religion' (13.7%) also being high, and lowest again among the Jewish group (6.9%) (Figure 3).

Figure 3: Age-standardized percentages of people reporting 'not good' health, by religion, Great Britain, 2001



Source: Census, April 2001, Office for National Statistics; Census, April 2001, General Register Office for Scotland  
 Note: These figures are for all people of all ages.

Clearly, the pattern presented for Great Britain is dominated by the data for England. However, disaggregated data for Wales are not currently available from the Office for National Statistics (ONS). The statistics reported for England & Wales combined mirror those above, with self-reported not good health status among males being highest in Muslims, closely followed by 'Other Religion' and then Sikhs and Buddhists. Among females, Muslims stood out as having by far the highest proportion reporting not good health, followed by Sikhs, and then the 'Other Religion' category.

Patterns of poor health by religion have been reported on separately for the Scottish Census and the age-sex proportions are presented in Table 6 below. We have computed age-standardized rates for men and women aged 16 years and over using the European Standard Population and these are also shown in the table. These figures indicate that in Scotland, as in Great Britain as a whole, Muslims were most likely to report 'not good' health among both males and females out of all the religious groups. Other groups with relatively high levels of 'not good' health were Sikhs, Roman Catholics and those reporting 'other religion'. Hindu and Jewish men had particularly low levels of self-reported 'not good' health. Looking at the age-

specific rates, the high levels of 'not good' health reported among the older age-groups of Muslims, Sikhs and Hindu women are notable.

Table 6: Percentages of people aged 16+ reporting 'not good' health by age-group, sex and religious group, Scotland, 2001

		16 - 29	30 - 49	50 - Pension able age	Pension able age - 74	75+	Age standardized rate all people aged 16+
Church of Scotland	Male	2.9	7.3	16.5	18.0	24.2	10.2
	Female	3.4	8.3	14.4	16.5	27.5	10.4
Roman Catholic	Male	4.1	10.3	25.6	27.6	33.0	15.1
	Female	4.5	11.6	23.1	26.4	36.0	15.4
Other Christian	Male	5.6	13.1	17.7	24.0	21.7	13.7
	Female	4.9	10.8	17.5	17.1	30.0	12.5
Buddhist	Male	5.6	13.1	17.7	24.0	21.7	13.7
	Female	4.9	10.8	17.5	17.1	30.0	12.5
Hindu	Male	1.8	3.3	13.4	18.7	43.3	8.8
	Female	1.8	6.5	14.7	32.8	52.9	13.3
Jewish	Male	1.8	7.6	13.6	16.0	29.0	9.4
	Female	5.2	8.0	14.0	15.9	31.6	10.8
Muslim	Male	3.5	9.1	28.8	31.8	36.2	15.8
	Female	4.1	13.8	36.1	47.1	43.8	21.2
Sikh	Male	2.2	10.3	24.3	27.9	45.2	15.0
	Female	2.8	13.0	33.5	38.8	33.7	19.1
Other religion	Male	5.2	10.1	18.2	23.9	29.7	13.1
	Female	7.0	13.9	22.5	22.3	29.0	15.7
No religion	Male	3.4	7.0	15.7	20.1	27.3	10.4
	Female	4.2	8.5	15.6	19.5	30.5	11.5

Source: Analysis of religion in the 2001 Census, Scotland, <http://www.scotland.gov.uk/Publications/2005/02/20757/53575>

Notes: Age standardized rates computed by the authors using direct standardization and the European Standard Population.

#### *Percentage of people reporting not good health: HSE 2004 data*

As an alternative source of information on self-reported health among people of different religious groups, we made use of the HSE, 2004. No such survey data are available for Scotland or Wales. Table 7 presents the crude and age-standardized

rates of self-reported 'not good' health for all people aged 16 years and over.

Among men, it was the Sikh group that had the highest proportion reporting not good health, followed by the Muslim group, and among women, Muslims had the highest proportion followed by Sikhs. Examination of confidence intervals suggested that differences between the Muslims and the White Christian group were statistically significant among both men and women, but not so for Sikhs; a finding that reflects the smaller sample size.<sup>2</sup> It should be noted that the sample sizes for those reporting to be Jewish and Buddhist were too small to sustain meaningful analyses and are therefore not reported here.

Though the actual levels of 'not good' health cannot be compared across the two data sources due to differences in data collection method, question wording and age-group covered, the patterns between religious groups are broadly consistent across the Census and HSE findings.

Table 7: Percentage of people aged 16+ years self-reporting 'not good' health (fair/bad/very bad) by religious group, England, 2004

	Men			Women		
	Crude %	Age-standardized	N	Crude %	Age-standardized	N
No religion (White)	19.7	22.2	608	19.4	21.9	560
Christian (White)	23.9	21.3	1,869	26.9	23.3	2,653
No religion (minority)	26.0	29.0	414	25.0	31.5	402
Christian (minority)	26.3	24.7	1,133	24.1	22.7	1,653
Muslim	29.3	36.7	967	35.0	48.0	1,131
Hindu	30.3	31.2	296	27.8	31.6	305
Sikh	34.9	37.9	106	36.1	42.8	145

Source: HSE 2004, authors' analyses.

Notes: Estimates for the Christian (White) and the No religion (White) come from the core sample while all others come from the minority ethnic boost sample. Figures presented are crude rates not adjusted for differing age structures and also age-standardized rates standardized using the European Standard Population in 5 years age-groups up to 70+. Rates are not presented for Buddhist or Jewish groups since numbers are very small. N's shown are the unweighted sample sizes.

<sup>2</sup> Approximate confidence intervals were computed for both crude and age-standardized rates using estimated design factors.

*Ethno-religious groups:*

We present below the simple, crude rates among religio-ethnic groups as an indication of the differing levels of 'not good' health experienced among these groups (Table 8). Clearly, small sample sizes limit the power to detect statistically significant differences between groups. Nevertheless, the elevated levels of 'not good' health among the Muslims across the ethnic categories and the Sikhs are a consistent pattern, even without adjusting for their younger age-structures.

Table 8: Percentage of people self-reporting 'not good' health (fair/bad/very bad) (crude rates) by ethno-religious group, England, 2004

	%	Men		Women	
		N	%	N	
Black Caribbean no religion	26.2	96	31.9	91	
Black Caribbean Christian	26.7	304	38.9	538	
Black African Christian	11.9	269	20.1	349	
Black African Muslim	19.0	72	28.6	91	
Indian Christian	10.7	33	22.5	53	
Indian Muslim	37.7	71	31.7	76	
Indian Hindu	30.1	294	27.8	305	
Indian Sikh	34.9	106	36.1	145	
Bangladeshi Muslim	31.8	400	36.0	466	
Pakistani Muslim	27.5	420	35.7	492	
Chinese no religion	16.5	192	20.7	191	
Chinese Christian	20.9	101	20.0	123	
Irish Christian	29.5	422	21.1	578	
Irish no religion	27.0	69	22.3	66	
White Christian	23.9	1869	26.9	2653	
White no religion	19.7	608	19.4	560	

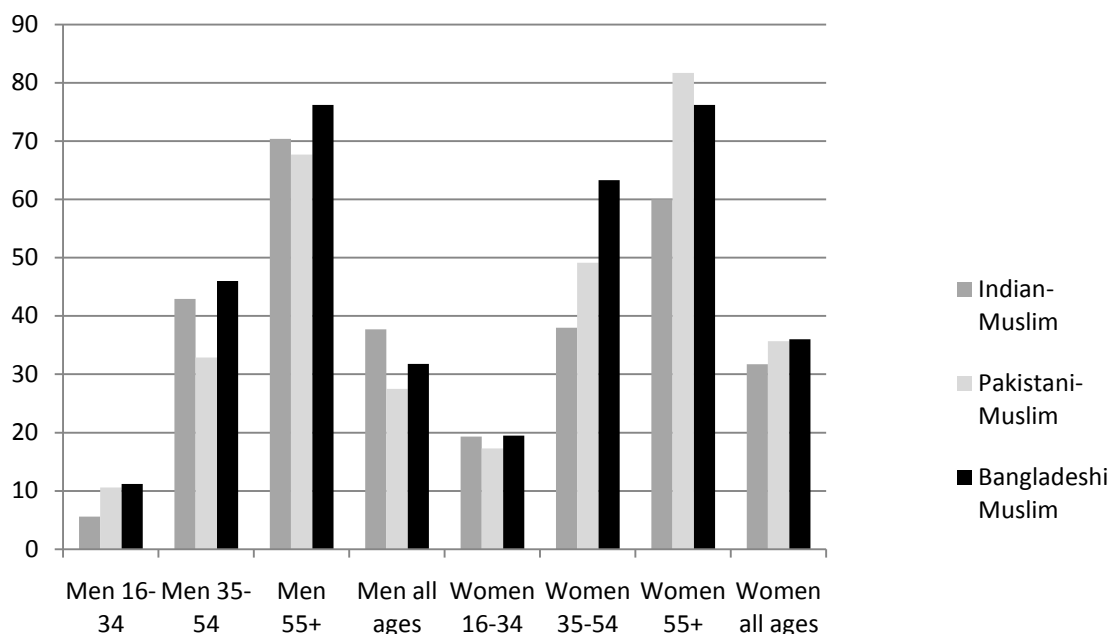
Source HSE 2004, authors' analyses.

Notes: No Jews included. Numbers of Chinese Buddhist too small to include. Rates given are crude rates, unadjusted for differing age structures.

There is also some indication here that levels of self-reported ill-health vary *within* ethnic groups by religion - a pattern that was shown in Nazroo's analysis of the Fourth National Survey of Ethnic Minorities (FNSEM) 1993-4 (Nazroo, 1997). Small numbers preclude detailed analysis, but we present below the levels of self-reported

'not good' health by ethnic group *among* Muslims, and also by religion *among* Indians.

Figure 4: Percentage of people reporting not good health by age, sex and religio-ethnic group, Muslim groups compared, HSE 2004.



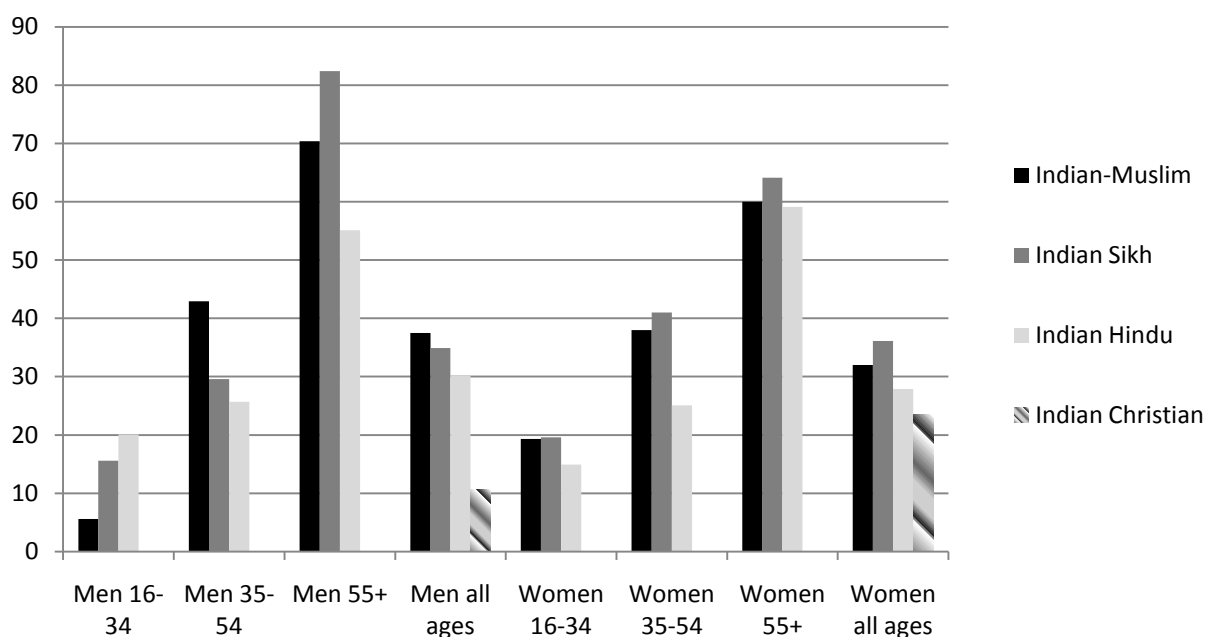
Source: HSE 2004, authors' analysis

Note: All-age estimates are crude rates, not standardized for age.

Numbers of Black African Muslims were very small in the survey and so are not included in the chart above. The patterns by age and sex are complex (Figure 4), particularly among men, and the Indian Muslim rates are based on small numbers meaning that the estimates are imprecise. Among women aged 35 and over, the data suggest that levels of not good health may be higher among Pakistani and Bangladeshi Muslims than among Indian Muslims, though small numbers preclude any firm conclusions.

Among the Indian ethnic group (Figure 5), a smaller proportion of the Hindu sample reported not good health than the other religions in all age-sex groups except among the youngest age-group of men. Numbers of Indian Christians were too small to produce age-specific estimates, but their overall crude rate was the lowest among both men and women.

Figure 5: Percentage of people reporting not good health by age, sex and religio-ethnic group, among those reporting their ethnicity as 'Indian', HSE 2004.



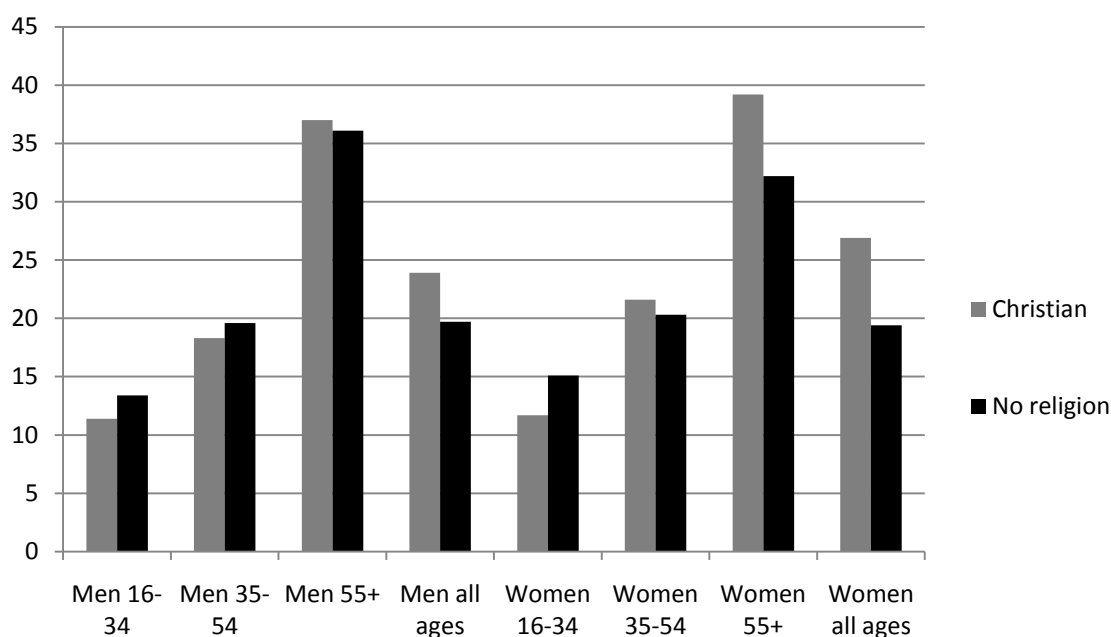
Source: HSE 2004, authors' analysis

Note: All-age estimates are crude rates, not standardized for age.

It is also of interest to explore whether there are religious differences in health outcomes among the White majority. Figure 6 below compares self-reported poor health among White Christians and Whites who report no religion. The numbers were too small to compare those who were Christian with those who reported no religion for the Black Caribbean group. The overall crude rates show that people reporting no religion are less likely to report not good health than those who report themselves as Christian. However, this is in part explained by the younger age-profile of those who state no religion. Age-specific comparisons suggest modest and non-significant differences between the two groups, except among older women, where Christians report significantly worse health.



Figure 6: Percentage of people reporting 'not good' health by religion among those reporting their ethnicity as 'White', by sex, England 2004



Source: HSE 2004 authors' analysis  
 Notes: All age rates are crude not adjusted for age,

*Self-reported not good health: multivariate analyses of HSE data*

Using HSE data pooled across 1999 and 2004 - the two years that have included ethnic boost samples - Karlsen and Nazroo have been able to look more closely at patterns of ill-health by religio-ethnic groups (Karlsen and Nazroo, 2009ab; Karlsen and Nazroo, in press). They performed multivariate analyses to explore the associations between ethno-religious groups and self-reported health status (as well as a number of other indicators of health (LLTI, diagnosed diabetes, diagnosed hypertension). They found that the health of the White Christian group was as good as, or better than, all the other ethno-religious categories identifiable through the survey (though HSE did not cover all such groups in the population). In very few instances did minority groups stand out as better than the White Christians on any of the indicators examined. The Muslim group stood out as having the most disadvantaged health indicators. In contrast with Indian Muslims and Sikhs, the health of Indian Christians and Hindus compared more favourably with that of White Christians.

In Table 9 below we reproduce their results for self-reported 'not good' health. The figures in bold indicate the odds ratios for comparisons against the White British

Christian group that were statistically significantly different from one, indicating an elevated risk of 'not good' health. Among men, Irish Christians had significantly higher odds of reporting 'not good' health than White British Christians. Among both men and women, Black Caribbean Christians, Black Caribbeans with no religion, Pakistani Muslims, Bangladeshi Muslims, Indian Muslims, Indian Sikhs and Indian Hindus, the odds ratios were also greater than one indicating a significantly higher risk of reporting 'not good' health. The largest odds ratios were seen for the Bangladeshi Muslims. None of the minority ethno-religious groups had significantly lower odds of reporting not good health than the White British Christians.

Table 9: Odds of reporting health to be 'not good' adjusted for age, by sex and ethno-religious group, England, HSE 1999 and 2004 pooled data

Religion	Ethnicity	%	Men		Women		
			Age-standardised odds	Un-weighted bases	Age-standardised odds	Un-weighted bases	
Christian	White British	25	1.00	4644	26	1.00	6288
	Irish	32	<b>1.50</b>	718	22	0.85	1011
	Black Caribbean	32	<b>1.57</b>	660	40	<b>2.41</b>	1040
	Indian	17	0.83	55	23	1.17	70
	Chinese	19	0.96	145	13	0.60	189
	African	17	0.97	267	17	0.91	333
	None	White British	19	1.01	1257	19	0.99
None	Black Caribbean	29	<b>1.75</b>	161	31	<b>2.38</b>	150
	Chinese	24	1.52	376	12	0.62	401
	Muslim	Pakistani	28	<b>1.88</b>	1014	36	<b>2.84</b>
Muslim	Bangladeshi	37	<b>3.01</b>	921	36	<b>3.04</b>	1023
	Indian	34	<b>2.14</b>	126	39	<b>2.80</b>	144
Muslim	African	8	0.49	76	26	1.96	85
	Sikh	Indian	30	<b>1.78</b>	307	37	<b>2.57</b>
Hindu	Indian	30	<b>1.88</b>	584	27	<b>1.50</b>	613

Source: Adapted from (Karlsen and Nazroo in press)

Notes: 'Not good' includes fair, poor or very poor. \* White British and other white groups, excluding Irish people.

**Limiting long-term illness (LLTI):***Percentage of people reporting limiting long-term illness or disability: 2001 Census data*

As shown in Table 10, age-standardized rates of LLTI for all people for Great Britain as a whole were highest among Muslims for both males and females, though males and females reporting 'any other religion' and also Sikh females, had high rates. Jewish males and females were the least likely to report an LLTI when age standardized rates were compared.

Table 10: Age standardised limiting long-term illness or disability rates (LLTI): by religion and sex, Great Britain, April 2001

	Men		Women	
	Crude LLTI rates	Age standardised LLTI rates	Crude LLTI rates	Age standardised LLTI rates
Christian	19.1	15.9	21.0	15.3
Buddhist	14.8	16.4	13.4	15.4
Hindu	12.5	15.6	15.0	18.9
Jewish	17.0	12.6	20.5	12.8
Muslim	13.2	21.4	14.1	24.3
Sikh	13.1	17.5	16.1	21.4
Any other religion	22.6	21.7	24.6	22.7
No religion	12.2	16.0	10.4	15.3
Not stated	17.9	17.7	21.2	16.9
<b>Total</b>	<b>17.4</b>	<b>16.1</b>	<b>19.3</b>	<b>15.6</b>

Source: Census, April 2001, Office for National Statistics Census, April 2001, General Register Office for Scotland

Age-sex patterns of LLTI by religion are shown in Table 11 for Scotland alone. Patterns are complex and it should be remembered that numbers are not large in some of the cells. Among men the religions with the highest prevalence of LLTI at each age-group were: 16-29 years, Roman Catholic 8.2%, 30-49 years, Buddhist, 17.7%, 50-pensionable age, Muslim, 45.1%, pensionable age – 74 years, Muslim, 63.3% and 75+ Hindu, 76.7%. Among women, the religions with the highest prevalence of LLTI at each age-group were: 16-29 years 'Other religion' 9.5%, 30-49 years 'Other religion' 20.5%, 50-pensionable age Muslim 50.3%, pensionable age to 74 years Muslim 70.1% and 75+years Hindu 82.4%. We have computed age-standardized rates for all people aged 16 years and over using the European

Standard Population, the highest rates being among the Muslims for both men and women though Roman Catholics and Sikhs also have high rates.

Table 11: Percentage of people with long-term limiting illness and disability by current religion, Scotland 2001

		16-29	30-49	50- Pension age	Pension age-74	75+	Age- standard- ized all people 16+years
Church of Scotland	M	6.9	12.8	30.1	46.1	60.7	21.0
	F	6.3	12.9	25.5	39.5	66.5	20.4
Roman Catholic	M	8.2	16.4	41.3	56.5	67.7	26.6
	F	7.2	16.4	35.5	50.2	72.2	25.6
Other Christian	M	6.5	12.3	27.5	45.6	62.8	20.1
	F	6.4	14.2	26.6	40.6	68.4	21.3
Buddhist	M	7.5	17.7	31.7	47.0	58.7	23.3
	F	7.0	14.2	27.9	42.3	68.6	22.0
Hindu	M	3.1	4.6	22.5	49.0	76.7	16.3
	F	3.7	9.9	24.3	56.7	82.4	22.0
Jewish	M	4.3	10.9	24.2	39.5	61.3	17.6
	F	7.2	9.8	23.7	37.0	66.6	18.8
Muslim	M	6.9	14.4	45.1	63.3	60.9	26.7
	F	6.4	18.9	50.3	70.1	73.6	30.7
Sikh	M	5.3	16.2	39.4	50.5	54.8	24.1
	F	5.4	17.2	42.0	62.9	69.6	28.4
Another Religion	M	7.8	15.7	31.8	45.6	65.1	22.8
	F	9.5	20.5	34.0	47.9	69.7	26.9
No religion	M	7.1	11.8	27.4	46.6	61.7	20.1
	F	6.7	12.4	26.1	42.2	65.6	20.8

Source: Analysis of religion in the 2001 Census, Scotland, <http://www.scotland.gov.uk/Publications/2005/02/20757/53575>

Notes: Age standardized rates computed by the authors using direct standardization and the European Standard Population.

*Percentage of people reporting LLTI: HSE 2004 data*

We draw on the HSE 2004 survey as a further source of data on LLTI by religion, though this of course relates only to England. Table 12 presents the percentages of people reporting an LLTI by sex for the largest religious groups. Age-standardized rates have been computed using the European Standard Population. In line with the Census data reported above, the Muslim and Sikh groups had the highest levels of LLTI once adjustments were made for differing age structures. Muslim and Sikh women had a particularly high percentage reporting LLTI, again mirroring the pattern in the Census data.

Table 12: Percentage of people aged 16+ years self-reporting LLTI by religious group, England, 2004

	Men			Women		
	Crude %	Age-adjusted	N	Crude %	Age-adjusted	N
No religion (White)	16.7	19.4	607	21.1	24.2	560
Christian (White)	25.7	22.6	1867	29.4	25.4	2649
No religion (minority)	15.1	18.6	414	16.7	19.4	403
Christian (minority)	24.4	22.1	1134	23.2	22.2	1652
Muslim	22.1	27.3	968	26.3	37.4	1132
Hindu	22.3	23.3	296	16.3	18.4	305
Sikh	26.0	31.4	106	25.7	32.9	145

Source: HSE 2004, authors' analyses.

Notes: Estimates for the Christian (White) and the No religion (White) come from the core sample while all others come from the minority ethnic boost sample. Figures presented are crude rates not adjusted for differing age structures and age-standardized rates based on the ESP. Age-standardized rates are not presented for Buddhist group since numbers are very small.

*LLTI: multivariate analyses of HSE data*

We again report findings from the multivariate analyses performed by Karlsen and Nazroo (Karlsen S. and Nazroo J., 2009a, in press) to explore evidence of differentials in the prevalence of LLTI among different ethno-religious groups. Table 13 below presents the odds of reporting LLTI as compared to the White British Christian comparator for various minority ethno-religious groups, adjusted for age. The table shows that among men, Chinese with no religion and African Muslims were less likely than the White British Christian group to report LLTI, but Irish Christians, Pakistani Muslims, Bangladeshi Muslims, and Indian Muslims were all

more likely to report LLTI. Among women, it was the Chinese Christians, African Christians and Chinese with no religion who had lower odds of reporting LLTI than the White British Christians, while Black Caribbean Christians, Black Caribbeans with no religion, Bangladeshi Muslims, Pakistani Muslims and Indian Muslims were all more likely to. Odds ratios for Sikhs were greater than one, but did not reach statistical significance.

Table 13: Odds of reporting LLTI adjusted for age, by sex and ethno-religious group, England, HSE 1999 and 2004 pooled

		Men			Women		
		%	Age- standardised odds	Un- weighted bases	%	Age- standardised odds	Un- weighted bases
Christian	White British	26	1.00	4644	28	1.00	6291
	Irish	30	<b>1.28</b>	718	25	0.90	1010
	Black Caribbean	27	1.11	662	29	<b>1.25</b>	1042
	Indian	18	0.88	55	17	0.72	70
	Chinese	14	0.61	145	8	<b>0.29</b>	125
	African	15	0.81	267	9	<b>0.41</b>	333
None	White British	18	0.88	1257	21	1.07	1113
	Black Caribbean	23	1.23	162	31	<b>2.15</b>	150
	Chinese	6	<b>0.32</b>	376	5	<b>0.23</b>	401
	Pakistani	21	<b>1.23</b>	1015	27	<b>1.75</b>	1108
Muslim	Bangladeshi	27	<b>1.79</b>	920	21	<b>1.31</b>	1023
	Indian	28	<b>1.54</b>	126	30	<b>1.71</b>	144
	African	5	<b>0.34</b>	76	20	1.34	85
	Indian	29	1.66	306	26	1.37	350
Hindu	Indian	18	0.90	584	18	0.78	613

Source: Adapted from (Karlsen S. and Nazroo J. in press)

#### *Trends over time in general health by religion:*

It is not possible to ascertain trends over time in religious differentials in general health due to data shortages. However, it is worth noting that analyses of data from the 1993-4 FNSEM found evidence of higher levels of self-reported not good health,

LLTI and also heart disease among Muslims within the Indian/African Asian ethnic group when compared to Hindus in this ethnic group. It therefore seems likely that the disadvantaged health situation of Asian Muslims has persisted for some time.

**Poor mental health or wellbeing**

*Percentage of people reporting high GHQ12 score: HSE 2004 data*

The chosen EMF indicator of poor mental wellbeing - GHQ12 score of four or more - is available for religious groups from the HSE 2004 for England only. Table 14 presents the percentage of people with a GHQ12 score of four or more by religious group for men and women. The highest percentage was among Muslims for both men and women, though there were no statistically significant differences between the groups.

Table 14: Percentage of people with GHQ12 score 4+ by religious group and sex, England, 2004

	<b>Men</b>			<b>Women</b>		
	Crude %	Age-adjusted	N	Crude %	Age-adjusted	N
No religion (White)	12.2	11.8	557	15.9	14.8	527
Christian (White)	10.8	10.7	1727	13.9	14.2	2478
No religion (minority)	10.4	12.5	346	17.4	17.2	341
Christian (minority)	12.2	12.0	340	15.8	16.3	1384
Muslim	16.4	19.4	670	17.8	26.9	724
Hindu	14.3	14.6	253	17.1	17.3	264
Sikh	13.2	14.8	84	12.5	14.3	116

Source: HSE 2004, authors' analyses.

Notes: Estimates for the Christian (White) and the No religion (White) come from the core sample while all others come from the minority ethnic boost sample. Figures presented are crude rates not adjusted for differing age structures and age-adjusted rates used ESP. Numbers too small for Buddhists and Jews.

These findings mirror those of King and colleagues (2006) in their analysis of data from the Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) Survey, in which no association was found between religious denomination (irrespective of ethnicity) and prevalence of Common Mental Disorder (as measured

by the CIS-R tool). The overall prevalence of CMD was estimated to be: 17.5% among people reporting no religion, 21.6% among those reporting themselves as Hindu including Jain, 17.0% among Sikhs, 16.4% among Muslims and 16.3% among Christians. When King et al. (2006) explored the relationship between religious faith in general and CMD, they found that people professing a religious life view were no less likely to have CMD than those without such a view. However, multivariate analyses suggested a positive association between holding a spiritual life view without a religious affiliation and risk of CMD. Individuals who reported neither a spiritual nor a religious life view had similar levels of CMD to those who reported themselves to be religious.



## Process

### *Treatment with dignity and respect*

The EMF includes an indicator of people's perception of whether or not they have been treated with dignity and respect when seeking healthcare. We carried out new analyses of data from the Citizenship Survey 2007 for England & Wales to examine reports of treatment by health services. The numbers are fairly small and should be treated with caution. Overall, high proportions - around 90% - of people in all the religious groups said that they were treated with respect when using health services 'all of the time or most of the time'. The groups with most people saying 'some of the time or less' were Buddhist, Muslim and No religion at all, though the differences were not large and did not reach statistical significance (Table 15).

Table 15: Percentage of people who answer 'some of the time or less' when asked whether they are treated with respect when using health services', by religion, England & Wales, 2007

	%	N
Christian	8.5	8,874
Buddhist	12.2	125
Hindu	7.9	754
Jewish	8.3	53
Muslim	9.1	1,765
Sikh	8.8	338
Any other religion	8.1	381
No religion at all	10.8	1,665
<b>All people</b>	<b>8.9</b>	<b>13,955</b>

Source: Citizenship Survey 2007, Authors' analysis.

Note: Overall Chi-Square, 13.67; df, 7; p=.07.

A further question in the survey asked about experiences of religious discrimination at the respondent's local doctor's surgery. Table 16 below shows that overall few people reported such discrimination, and the survey found that reports of discrimination in healthcare settings were less common than for other public services (Kitchen, Michaelson and Wood, 2005). Nevertheless, while just 0.4% of Christians reported such discrimination, 4.5% of Muslim respondents felt that they had experienced religious discrimination, a difference that was statistically significant. Numbers for other religious groups are small and do not reveal significant differences.

Table 16: Percentage of people reporting discrimination at their local medical surgery by religion, England &amp; Wales, 2007

<i>Religion</i>	%	N
Christian	0.4	8,929
Buddhist	0.0	129
Hindu	1.2	751
Jewish	2.4	52
Muslim	4.5	1,777
Sikh	1.5	340
Any other religion	0.8	384
No religion at all	0.5	1,676
All people	0.6	14,038

Source: Citizenship Survey 2007, Authors' analysis.

There are no national data on respect and dignity in treatment by religion for Wales or Scotland.

### ***Other evidence of health service experiences***

A somewhat less positive picture is painted by those detailed, qualitative studies that have explored healthcare experiences among individuals of minority ethnic and minority religious identity. By-and-large these studies have suggested rather low levels of satisfaction with services and some significant concerns around feeling unwelcome and disrespected by healthcare professionals (Bharj and Salway, 2008; Mir and Sheikh, 2010). Though a majority of these studies take an ethnicity focus (See Chapter 7 on Ethnicity), several have highlighted the ways in which certain religious identities - notably a Muslim identity - may result in particularly negative experiences in healthcare settings (as in other public service settings) (Worth et al. 2009; Mir and Sheikh, 2010). We return to the issue of religious sensitivity and appropriateness of health services in our discussion below.

### ***Health-related behaviours and life-style factors***

The EMF includes indicators relating to various aspects of maintaining a healthy life-style including: smoking; obesity; physical activity; consumption of fruit and vegetables, and alcohol consumption. We report on data from the HSE 2004 for

each of these areas across the religious groups for men and women separately in turn below. No such data are available for Scotland or Wales at the present time.

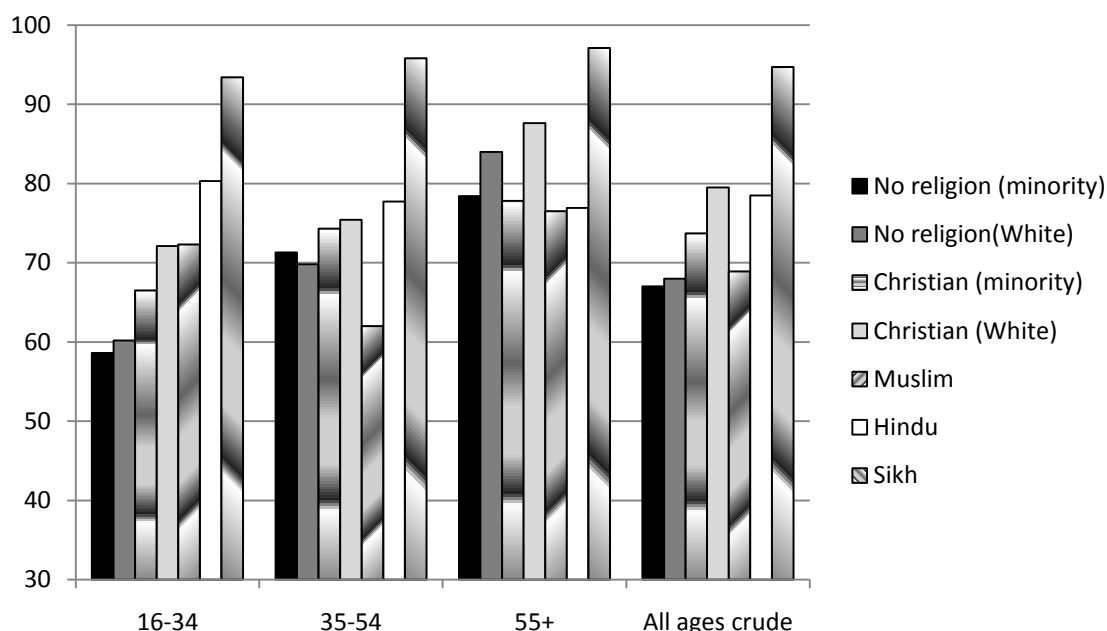
*Smoking:*

*Percentage of people not smoking, HSE 2004*

The chosen EMF indicator is 'percentage of people not currently smoking'. It is worth noting, however, that tobacco chewing is prevalent among some minority religio-ethnic groups, including among older Bangladeshi Muslim women, with associated health risks (Wardle, 2004).

Figure 7 and Figure 8 present the percentages of men and women respectively who report not currently smoking (including ex-smokers and never smokers) among each religious group. Among men, only the Sikh group stands out clearly as being more likely not to smoke than the other religions at all ages. Among the youngest men, those who report no religion are the most likely to be current smokers, while in the middle age-range, it is Muslim men who appear most likely to smoke.

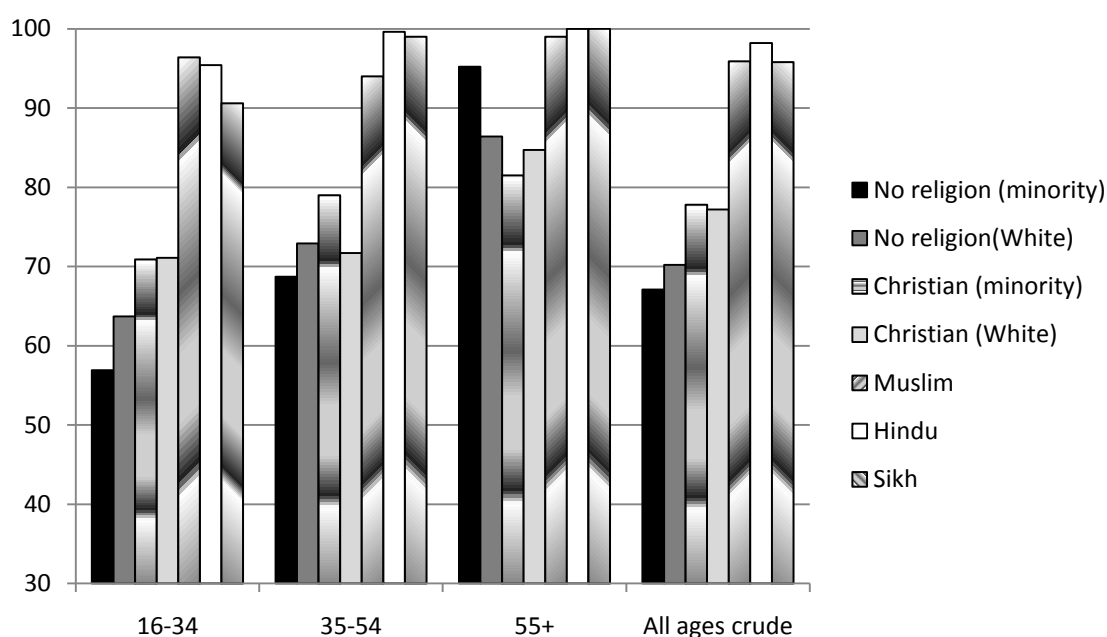
Figure 7: Percentage of men *not* currently smoking by age-group and religion, England, 2004



Source: HSE 2004, authors' analysis.

Note: Buddhist and Jewish numbers too small to produce estimates by age-band. Numbers in some older age-bands are small. Age standardization made little difference to the overall rates and crude rates are therefore reported here.

Figure 8: Percentage of women *not* currently smoking by age-group and religion, England, 2004



Source: HSE 2004, authors' analysis.

Note: Buddhist and Jewish numbers too small to produce estimates by age-band. Numbers in some older age-bands are small. Age standardization made little difference to the overall rates and crude rates are therefore reported here.

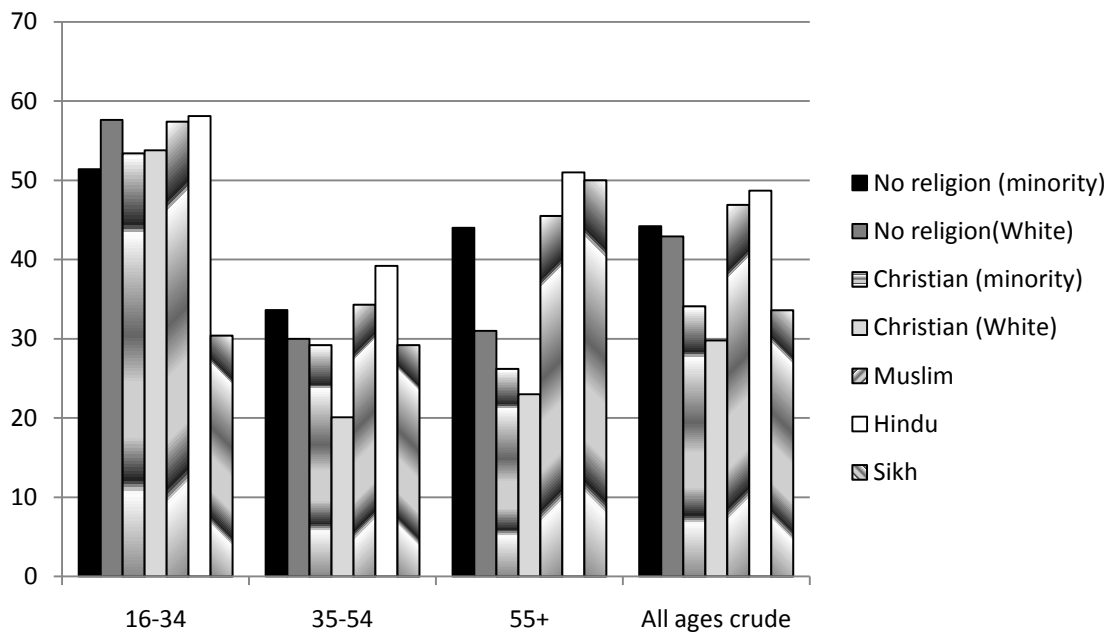
Looking at women, we see some important differences in smoking behaviour, with Muslim, Hindu and Sikh women standing out at all ages as being less likely than other religions to be current smokers. Gender differences are large among Hindus and Muslims, while the great majority of both Sikh men and Sikh women are non-smokers, and among Christians and those with no religion the gender differences are much smaller too, but with a larger proportion of both sexes smoking.

*Overweight and obesity:*

*Percentage of people of 'healthy/normal' weight, HSE 2004*

Figure 9 and Figure 10 present the percentages of men and women respectively whose BME was within the normal/healthy range of 18.5 to less than 25. No clear patterns in the percentage of men who are of healthy-normal weight could be discerned between the religious groups. Similarly, it was not possible to identify clear differences among women. The declining proportion of people who are of normal/healthy weight with increasing age is, however, clearer for women, with just 35% or less women aged 55 years plus having a healthy weight in all religious groups.

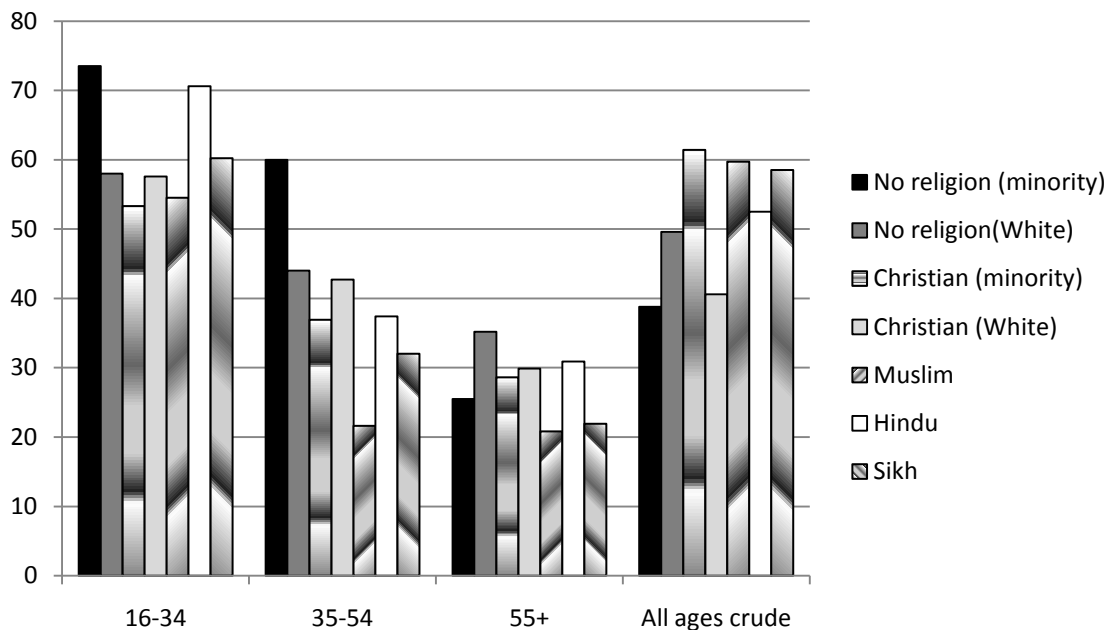
Figure 9: Percentage of men with normal/healthy weight, by age-group and religion, England, 2004



Source: HSE 2004, authors' analyses.

Notes: All-ages rate are crude rates not standardized for differing age structures. Normal/healthy weight=BMI18 to less than 25.

Figure 10: Percentage of women with normal/healthy weight, by age-group and religion, England, 2004



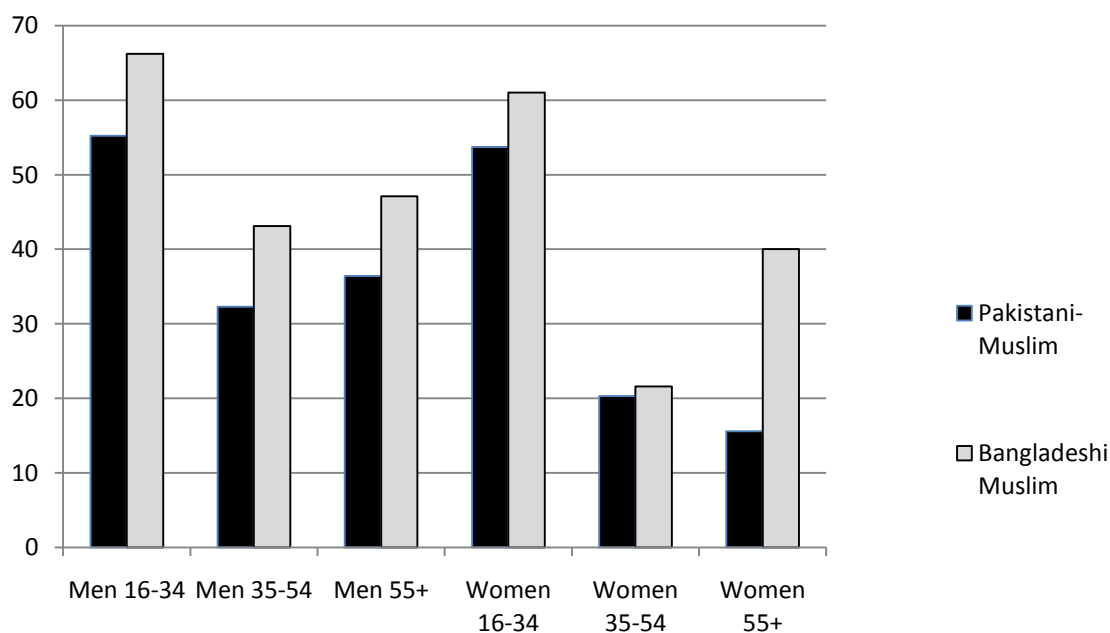
Source: HSE 2004, authors' analyses.

Notes: All-ages rate are crude rates not standardized for differing age structures. Normal/healthy weight=BMI18 to less than 25.

*Healthy weight: ethno-religious differences*

As noted above, there is important diversity within some of the religious groups in terms of ethnic identity (as well as other factors). It is therefore of interest to examine patterns among religio-ethnic groups where this is possible. The numbers of Black African Muslims and Indian Muslims in the sample were small, however a comparison between Pakistani and Bangladeshi Muslims seemed reasonable to explore. At all ages and across both sexes, the estimated proportion of Bangladeshi Muslims who have a normal/healthy weight is higher than the proportion of Pakistani Muslims (Figure 11). The sample sizes are not large enough to be confident that these differences in the estimates reflect true differences in the wider population, but analyses by Karlsen and Nazroo reported below support this assertion.

Figure 11: Percentage of people with normal/healthy weight, by age-group, Pakistani and Bangladeshi Muslims compared, England, 2004



Source: HSE 2004, authors' analyses. Normal/healthy weight = BMI 18 to less than 25.

Karlsen and Nazroo used pooled 1999 and 2004 HSE data to examine odds of having BMI of 25 or over (Karlsen and Nazroo, in press). In comparison with the White Christian group, men were significantly *less* likely to have a raised BMI in the following religio-ethnic groups: Chinese Christian; Chinese no religion; Buddhist; Black African Christian; White British no religion; Black Caribbean no religion;

Pakistani Muslim, Bangladeshi Muslim, Indian Muslim and Indian Hindus. Among women, however, the picture was very different with none of the minority religio-ethnic groups having significantly lower odds of high BMI, and the following groups all having significantly *higher* odds: Black Caribbean Christians; Black African Christians; and Pakistani Muslims.

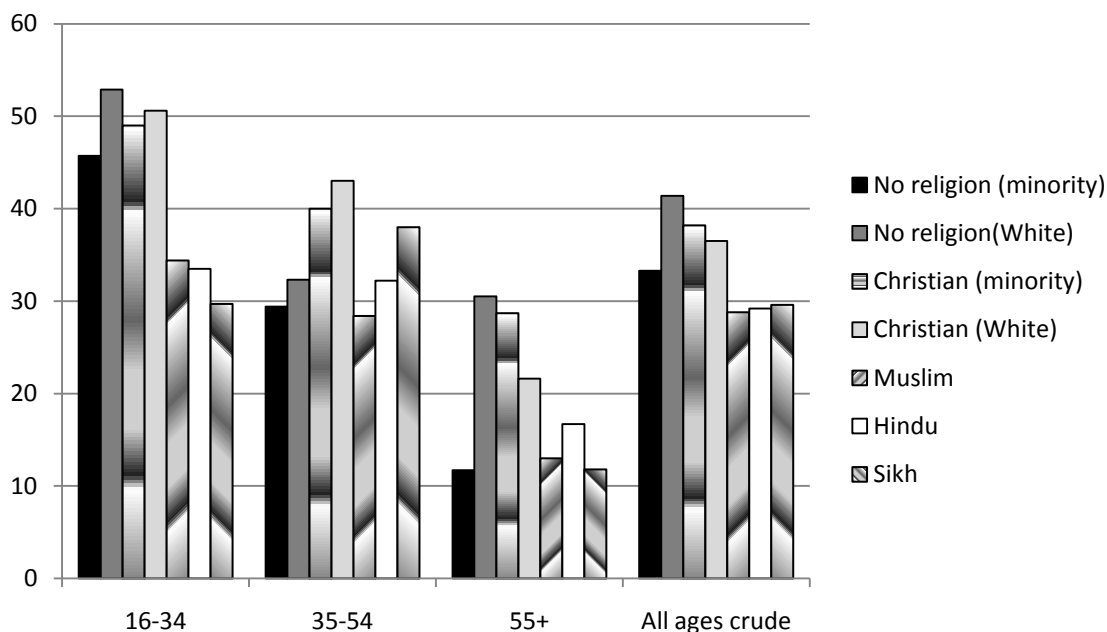
Karlsen and Nazroo (in press) also explored a measure of central obesity - waist to hip ratio of over 0.85 for women and 0.95 for men - across different religio-ethnic groups. Waist-hip ratio (WHR) is considered a more useful measure than body mass index, particularly when comparing ethnic groups, because it more clearly distinguishes body fat from body shape. Compared to the White British Christian group, among men the age-adjusted odds of a high WHR were significantly higher among Pakistani Muslims, Indian Muslims and Sikhs, and significantly lower among Black Caribbeans with no religion. Among women, the odds were significantly raised in comparison with White British Christians among a majority of the minority religio-ethnic groups including: Irish Christians; Black Caribbean Christians; Indian Christians; Black African Christians; Black Caribbeans with no religion; Pakistani Muslims; Bangladeshi Muslims; Indian Muslims; Sikhs and Buddhists. This alternative measure therefore suggests that men in the minority religio-ethnic groups may not be as advantaged relative to White British Christians in terms of obesity-related ill-health risks as suggested by a comparison of BMI alone.

#### *Physical activity:*

##### *Percentage of people meeting physical activity guidelines, HSE 2004*

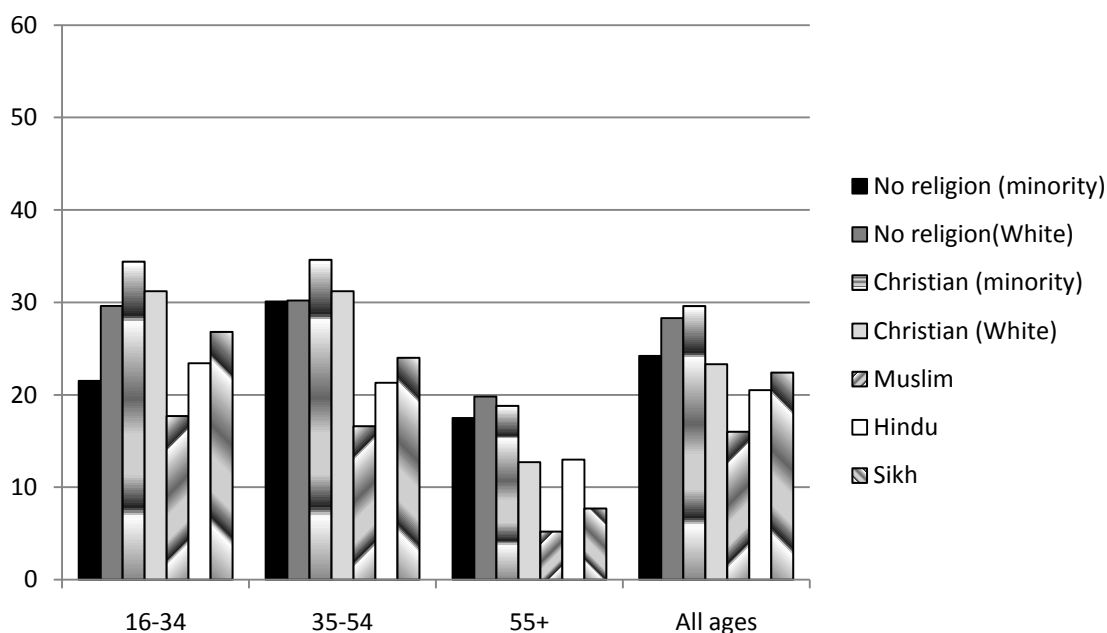
Figure 12 and Figure 13 present the percentage of men and women respectively who report physical activity levels that meet current government guidelines. The most striking differences are between men and women regardless of religious group, with far lower proportions of women meeting the guidelines. Lower proportions of people meeting the guidelines in the 55 years and over group are also clearly evident regardless of religious identity for both men and women. Among men the differentials by religion are not conclusive, though Muslims, Hindus and Sikhs do have lower proportions meeting activity guidelines than the White British Christian and White British no religion groups at all ages.

Figure 12: Percentage of men reporting that they meet guidelines for physical exercise, by age-group and religion, England, 2004



Source: HSE 2004, author's analyses

Figure 13: Percentage of women reporting that they meet guidelines for physical exercise, by age-group and religion, England, 2004



Source: HSE 2004, author's analyses

Among women (Figure 13), Muslims stood out as having the lowest proportions meeting the activity guidelines, though levels were low across the board. Given that we know self-reported physical activity over-estimates actual physical activity to a



large degree, this indicates that the great majority of women are not meeting current guidelines.

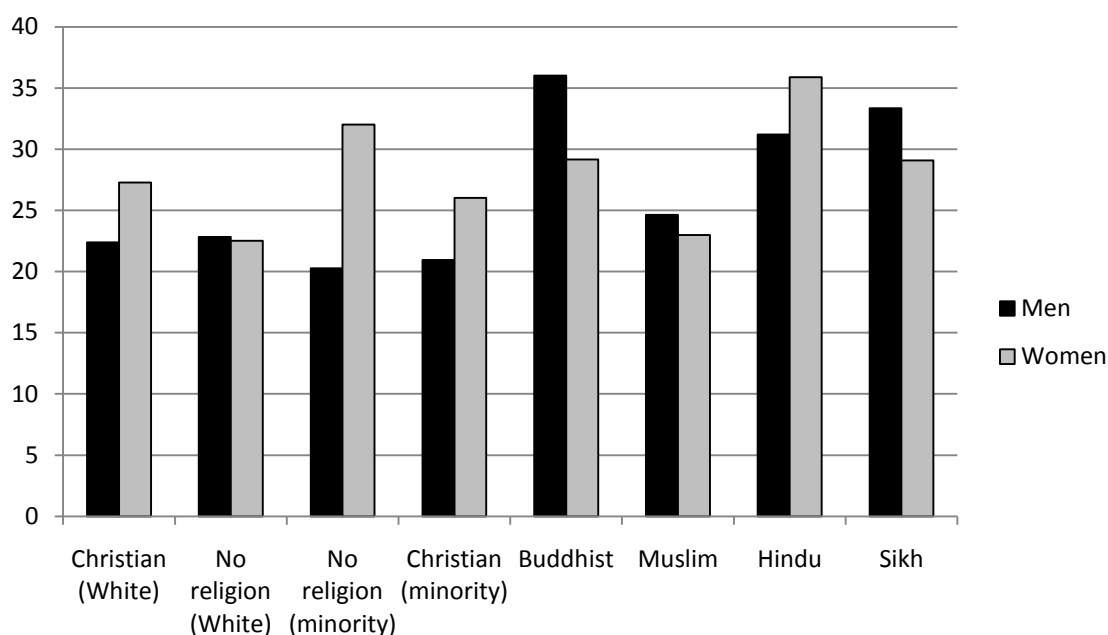
Karlsen and Nazroo's (in press) analysis of the pooled HSE datasets for 1999 and 2004 examined the odds of reporting no regular physical activity at all. Again, they took the White British Christian group as the comparator. Among both men and women almost all minority religio-ethnic groups had significantly higher odds of reporting no regular physical activity including: Black Caribbean and Irish Christians; Black Caribbeans with no religion; Pakistani Muslims, Bangladeshi Muslims, Indian Muslims, Sikhs and Hindus. Among women, the same was also true for Black African Muslims and Buddhists. Levels of no regular physical activity were strikingly high among Bangladeshi and Pakistani Muslim women - at 29% and 23% respectively.

*Healthy eating:*

*Eating at least five portions of fruit and vegetables a day, HSE 2004*

As can be seen in Figure 14, across all religious and sex groups, the proportion of people who consumed the recommended number of portions of fruit and vegetables ('5-a-day') was around one third or even less. Differences between the religious groups were not statistically significant, and there was no evidence that minority religious groups were disadvantaged in this area when compared with White British Christians or White British with no religion.

Figure 14: Percentage of people reporting that they meet guidelines for 5-a-day fruit and vegetable consumption, by age-group, sex and religion, England, 2004



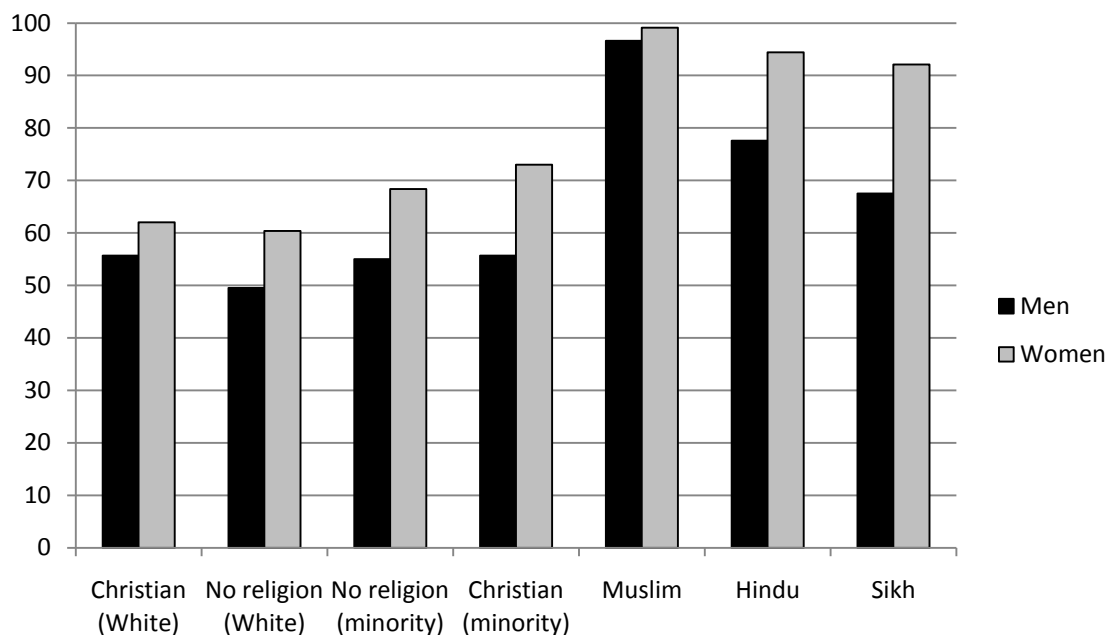
Source: HSE 2004, authors' analyses.

*Alcohol:*

*Alcohol consumption within government guidelines, HSE 2004*

Figure 15 illustrates the important religious differences in patterns of alcohol consumption across both sexes. Muslims, Hindus and Sikhs were more likely to report that they do not drink at all or drink only within government guidelines than Christians or those reporting no religion (regardless of ethnic identity). The differences were, not surprisingly, largest and statistically significant for men and women among the Muslims. Among Hindus and Sikhs, it was among women that the differentials were most important and statistically significant. Women were consistently more likely than men to drink within guidelines across all religious groups (though the differences were not statistically significant in all cases).

Figure 15: Percentage of people reporting that they drink alcohol within guidelines (including non-drinkers) by age-group, sex and religion, England, 2004



Source: HSE 2004, authors' analyses.

## Autonomy

The EMF does not include any quantitative indicators of autonomy. We discuss issues relating to autonomy in the discussion section below.

## Cross-over themes and vulnerable groups

As has been illustrated above, several of the largest religious groups in Great Britain, including Christians and Muslims, are very diverse in terms of ethnic make-up (as well as other dimensions of identity and socio-economic status). In many instances therefore, the broad religious categories lack meaning for analyses that aim to describe and understand differentials in health experiences and outcomes. Nevertheless, there may be aspects of health and healthcare for which it is meaningful to examine religious groups - for instance where there is a concern to understand and address the implications of particular religious practices for health status, or where there is evidence that religious identity over-rides other identities in shaping the ways in which healthcare providers treat patients. Nevertheless,

religious and ethnic identities inter-relate in complex ways and there is a need for cautious interpretation of simple descriptive differences between religious categories. The available data tend to suggest that Pakistani and Bangladeshi Muslims (and probably also Indian Muslims and Indian Sikhs, though smaller sample sizes have compromised analyses) have a poorer health profile on a range of indicators when compared to the White British Christian majority, and also when compared to Indian Hindus and Indian Christians. It should be remembered, however, that the currently available data do not sustain careful analyses of the interplay of ethnicity and religion across all potential groups of interest.

As with ethnicity, the social construction of gender roles, responsibilities and expectations are often closely tied to religious identities. Therefore, gendered patterns of health-related behaviour, as well as gendered health experiences and outcomes, vary between religious groups. This is illustrated in some of the indicators presented above - for instance patterns of smoking across gender vary importantly between religious groups. That said, some gendered differences are seen across all religious groups - such as women's disadvantaged position in relation to healthy levels of physical activity. The interplay of gendered and religious identities in relation to health experiences and outcomes has not been well articulated even in research that has foregrounded a concern with gender issues. This area deserves further investigation.

There is evidence to suggest that the experiences of disabled people may be patterned by their religious affiliation and their faith (Atkin, Ahmad and Jones, 2002). Factors that may contribute to such differential experiences include: 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 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 religious diversity (Atkin and Ahmad, 2000; Atkin and Rollings, 1993; McCarthy, Mir and Wright, 2008).

Though older age clearly brings a higher burden of ill-health across the religious groups, some religious groups may be more likely than others to enjoy good health

in later years. The data presented above suggest that older Muslim and Sikh women may have particularly high levels of poor health. The ways in which life-stages and the process of growing older are understood by people from different religious (and ethnic) backgrounds have been found to differ (Wray, 2003; Gerrish, McNair and Higginbottom, 2005), so that the experience and expectations of health and health services may also diverge with potential implications for how we identify and address apparent inequalities.

## **Discussion**

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

The available data tend to suggest that Muslims (and probably also Sikhs, though smaller sample sizes compromise analyses) have a much poorer health profile on a range of indicators when compared to the White British Christian majority.

It is important to recognise that there is variation both within religious groups by ethnicity and within ethnic groups by religion.

Most minority religious groups have less favourable patterns of physical activity when compared to the White British Christian majority, and there is evidence that most also have less favourable patterns of obesity (particularly among women). Though these are issues of concern across the population regardless of religion.

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

### ***Are there any emerging trends?***

The concerning rise in Islamophobia in recent years has been expressed within the health sector as in other arenas (Richardson, 2004)). The negative health consequences of victimisation (Paradies, 2006; Wamala, Bostrom and Nyqvist, 2007) suggest this trend may exacerbate the health disadvantage facing Muslim groups.

Since the exploration of health experiences and outcomes by religion is in its infancy in Great Britain, it is difficult to identify trends or changes over time. However, the increasing interest in religion as a factor shaping health and life chances is bringing new issues to the fore. Data from the FNSEM in 1993-4 suggested similar broad patterns of religious inequalities in health with significant health disadvantage among Muslims. However, available data do not allow an assessment of whether such inequalities are increasing or declining.

### ***What are the causes?***

It is increasingly recognised that inequalities in health and healthcare outcomes between religious and religio-ethnic groups are shaped by a complex mix of multifarious factors. However, our understanding of these factors is still fairly limited, particularly when the focus is on religious identity, rather than ethnic identity. Nevertheless, it is clear that some factors are far more important than others in accounting for the very large differences in health outcomes between the White British Christian majority and certain religio-ethnic groups.

#### *Biological and genetic factors:*

Genetic factors do not play an important role in explaining the health inequalities observed between different religious or religio-ethnic groups. Nevertheless, it must be recognised that, although religio-ethnic categories are poor proxies for genetically-determined risk factors, in some cases genetic factors do appear to contribute in part to elevated rates of particular diseases or conditions seen among some such delineated 'groups'. This is discussed in more detail in the Ethnicity Chapter.

#### *Norms, behaviours and expectations:*

Holding a particular religious identity may imply certain sets of beliefs and practices that have implications for health and healthcare outcomes and experiences. Therefore, though there is great diversity within groups and change over time in religious practices, at an aggregate level religiously informed beliefs 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 religious groups do better than the White British Christian majority on some key life-style related risks including alcohol consumption and smoking among women.

Moreover, beliefs and behaviours are shaped by local-level norms as well as broader understandings of religious doctrine, so that significant variety of behaviour can be found within religious groups. For instance, Bush and colleagues' (2003) study of influences on smoking among Bangladeshi and Pakistani Muslims identified important differences between the two groups in terms of the role that smoking played in male identity and sociability. They also found a wide variety of expressed opinions within both groups in terms of what religious teachings relating to addiction and intoxicants implied for smoking.

Religious beliefs and understandings may also shape specific health-seeking behaviours and the degree of compliance with the advice and prescriptions of health professionals. For instance, some Muslim women may choose not to take up an exercise referral scheme if the exercise classes on offer are open to both men and women. Another example is the reluctance of some Muslim patients to take medication that has been produced using porcine or alcohol derivatives. Such individual behaviours must, however, be seen within the context of the healthcare system and the degree to which religious preferences are understood, respected and accommodated (as discussed further below).

Religious identity also implies inclusion within (and exclusion from) particular networks of support; including in some cases membership of and attendance at religious institutions. 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 religious (and minority ethnic) identity, particularly those of lower socioeconomic status and newer migrants, are commonly heavily dependent upon such religio-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 religious 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 religious 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:*

We draw on the analyses by Karlsen and Nazroo (2009a, in press) of pooled data from the HSE 1999 and 2004 to first describe the socioeconomic profiles of different religio-ethnic groups in England, and then to explore the extent to which differing socioeconomic status can account for inequalities in health outcomes.

Table 17 presents five different indicators of low socioeconomic status across the main religio-ethnic groups that were identified in the HSE. A detailed discussion of the socioeconomic conditions of the different religious groups is beyond the scope of the current chapter, and we therefore highlight only the key patterns. Across all five indicators, Bangladeshi Muslims have the highest rates, followed by Pakistani Muslims for all indicators except the percentage of people in manual occupations, for which Sikhs occupy the second position. Black Caribbean Christians and Black Caribbeans with no religion also have high rates across most indicators. Important differences are also evident between Indian Christians, and Hindus who have more favourable profiles than Indian Sikhs and Indian Muslims. Of the minority groups, Chinese Christians have the most favourable profile. It is important to note the relatively favourable income profile of White Christians in comparison with other groups, despite a higher rate of no qualifications and manual occupations, than several other groups - an advantage that has been well-documented (Berthoud, 2002).



Table 17: Indicators of socio-economic position by religio-ethnic group, England, 1999/2004

	<i>No qualific- ations</i>	<i>Manual occupation</i>	<i>Registered unemployed</i>	<i>Unemployed or long-term sick</i>	<i>Bottom income quintile</i>
<u>Cell percentages</u>					
<b>White Christian</b>	33	48	2	6	18
<b>Christian minority</b>					
All	29	48	3	8	23
Irish	33	48	2	8	19
Black Carib.	34	56	5	11	35
Black African	14	40	4	8	30
Chinese	18	23	1	2	8
Indian	15	30	3	5	18
<b>No religion</b>					
All	18	40	3	6	14
White British	18	39	3	6	14
Chinese	24	51	7	8	25
Caribbean	24	47	8	15	37
<b>Muslim</b>					
All	42	56	7	12	51
Pakistani	44	61	6	12	52
Bangladeshi	52	74	9	13	73
Indian	37	53	4	9	51
<b>Sikh</b>	38	64	2	7	38
<b>Hindu</b>	25	32	3	7	22
<b>Buddhist</b>	26	46	2	6	28

Source: HSE 1999/2004, (Karlsen and Nazroo 2009a)

Note: White Christian includes White British and other white groups, excluding Irish people

We turn now to consider the extent to which the poorer socioeconomic status of several of the minority religious groups might contribute to their poorer health outcomes relative to the majority White British Christians. One way to assess the

contribution of socioeconomic factors to the excess burden of ill-health experienced by minority religio-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. Jay Kaufman and colleagues discuss these issues in some detail (Kaufman et al., 1998; Kaufman, Cooper and McGee, 1997). In brief, it is extremely difficult to control for differences in socioeconomic status between religio-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, religio-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 religio-ethnic identity 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 religio-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 religio-ethnic identity and health outcomes.

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 health inequalities between religio-ethnic groups.

Table 18 shows of age-standardised odds and odds adjusted for both age and social position for LLTI and 'not good' health computed by Karlsen and Nazroo from the HSE 1999 and 2004 pooled data sets. White British Christians are taken as the comparator. Looking first at LLTI, it can be seen that the odds ratios for Black

Caribbeans with no religion and for Sikhs remain significantly greater than one even after adjustment for the socioeconomic variables, though both are reduced in size slightly. In contrast, the odds ratios for Bangladeshi, Pakistani and Indian Muslims decline importantly in size and become non-significant once the controls for socioeconomic status are included, suggesting that the poorer socioeconomic conditions of these groups explains a large part of their excess risk of LLTI. In contrast, when the outcome of focus is self-reported 'not good' health, all the odds ratios that were statistically significant before controlling for socioeconomic status retain significance after the controls are introduced in the model. Nevertheless, the size of the odds ratios is reduced in all cases, and particularly so for the Pakistani and Bangladeshi Muslims. These findings suggest that lower socioeconomic status is playing an important role in the excess risk of poor health for these groups, but it is not the whole story. It is important to note the persistent disadvantage in self-reported health of Black Caribbeans within the Christian group even after controlling for their poorer socioeconomic circumstances.

Table 18: Odds ratios for LLTI and 'not good' health adjusted for age and social position, England 1999/2004 (all adults)

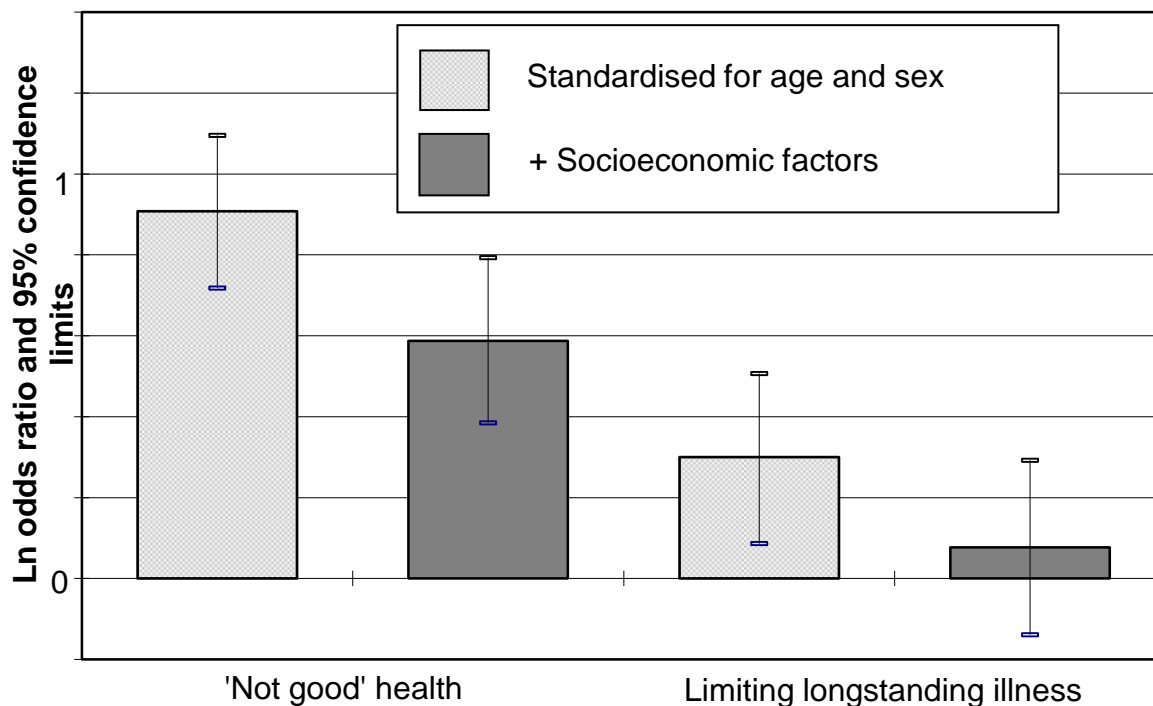
		LLTI		Self-reported not good health	
		Age-standardised odds**	Odds adjusted for social position	Age-standardised odds**	Odds adjusted for social position
Christian	White British	1.00	1.00	1.00	1.00
	Irish	1.06	1.05	1.09	1.07
	Black Carib.	1.18	1.07	<b>2.04</b>	<b>1.85</b>
	Indian	0.73	0.80	0.92	1.11
None	White British	0.97	1.05	1.00	1.15
	Black Carib.	<b>1.58</b>	<b>1.47</b>	<b>2.04</b>	<b>1.83</b>
Muslim	Pakistani	<b>1.42</b>	1.08	<b>2.26</b>	<b>1.49</b>
	Bangladeshi	<b>1.49</b>	1.08	<b>2.94</b>	<b>1.69</b>
	Indian	<b>1.70</b>	1.48	<b>2.68</b>	<b>2.10</b>
Sikh	Indian	<b>1.50</b>	<b>1.44</b>	<b>2.17</b>	<b>1.83</b>
Hindu	Indian	0.79	0.81	<b>1.59</b>	<b>1.75</b>

Source: HSE pooled data 1999 and 2004. Adapted from Karlsen and Nazroo (in press)

Note: Odds adjusted for social position computed while controlling for: economic activity, highest educational qualification gained, household income, and head of household's occupational class. White British includes White and White Other but not Irish.

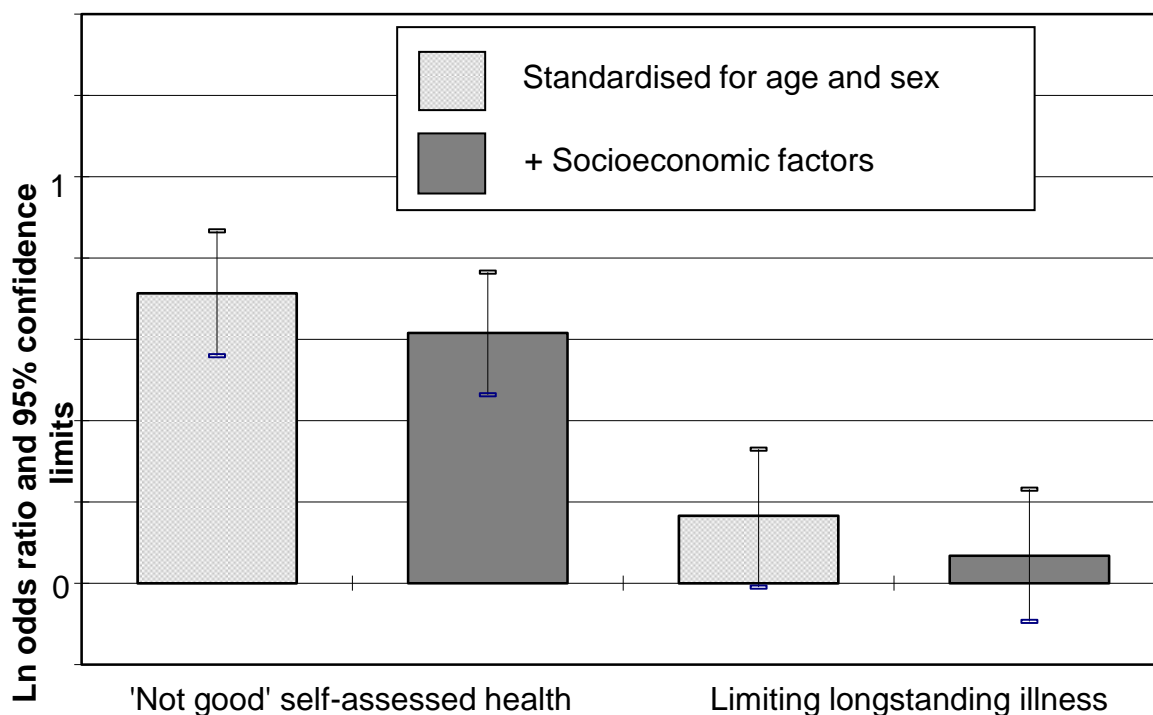
We present the results visually for Muslims as a whole and for Black Caribbean Christians in Figure 16 and Figure 17 respectively. The natural logarithm of the odds is used in these figures so that the visual size of the reduction is meaningful. Where the confidence interval (indicated by the bars) includes 0 this indicates a statistically non-significant difference.

Figure 16: Age-sex adjusted odds ratios with and without controls for socioeconomic status, Muslims compared to White British Christians



Source: HSE 1999 and 2004, adapted from (Karlsen and Nazroo, 2009a).

Figure 17: Age-sex adjusted odds ratios with and without controls for socioeconomic status, Black Caribbean Christians compared to White British Christians



Source: HSE 1999 and 2004. Adapted from (Karlsen and Nazroo (2009a).

*Design and delivery of health system:*

Health policy and strategy:

To-date religious identity has rarely been considered in any detail in policy aimed at addressing health inequalities in Great Britain. Where attention has been given to minority religio-ethnic communities, the key focus has been on ethnicity, though this has also been unsatisfactory in its detail (see Chapter 7 on Ethnicity). The Equality, Diversity and Human Rights section within the DH in England has in recent years emphasised the importance of NHS and social services taking account of the religious and cultural requirements of the spiritually diverse communities it serves and has produced a number of guidance documents to support commissioners and providers in ensuring that services are delivered appropriately to all (Equality and Human Rights, DH; DH, 2009). It is perhaps too early to tell whether such initiatives are likely to have any impact on the actual delivery of services.

Furthermore, these initiatives are largely separate from DH's mainstream health inequalities work and tend to focus on specific aspects of care rather than more systemic issues of social and economic marginalisation.

A majority of government health policy documents include no reference to religious diversity and associated issues of inequality.

Appropriateness and effectiveness of services and providers:

We discuss issues of service access and language/communication difficulties in Chapter 7 on Ethnicity but note that these issues will also apply to minority religious groups in some cases. Here we draw out the evidence that relates more specifically to religious identity. There are three broad ways in which the delivery of health services appears to contribute to the heightened levels of ill-health experienced by some religio-ethnic groups: failure of services and practitioners to understand and accommodate specific religious beliefs and practices that impact upon health and treatment outcomes; failure of services and practitioners to appreciate and support the spiritual needs of patients; and discriminatory attitudes and behaviours that directly compromise access to appropriate care and may contribute to levels of psychosocial stress.

There is evidence to suggest that the failure of services and individual practitioners to understand and accommodate patients' religious beliefs, preferences and behaviours does, in some cases, lead to sub-optimal care and may exacerbate levels of ill-health. For instance, the failure of GPs routinely to offer non-porcine and non-alcohol derivative drugs can result in patients opting not to take medications prescribed (Khokhar et al., 2008; Ward and Savulescu, 2006). Gatrad and colleagues (2005) point out that national and local formularies do not routinely highlight potentially unacceptable drugs or provide advice on suitable substitutes. Bravis and colleagues (2010) note that it is common practice to advise Muslim patients with diabetes not to fast during Ramadan but also illustrate that with appropriate advice and support some patients can fulfil the religious obligations they feel to fast as well as manage their condition effectively. Sheikh (2007) has highlighted the fact that male infant circumcision is only available through the NHS in a handful of NHS trusts across Great Britain. Another example that is commonly

cited relates to the provision of same-sex providers and single-sex facilities that some Muslim women regard as essential. Mir and Sheikh (2010) found evidence of Muslim 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. Worth and colleagues' (2009) study of Muslim and Sikh patients with life-limiting illness in Scotland concluded that 'institutional discrimination' created a barrier to appropriate care in many cases, reporting that:

*'Services often had difficulty managing basic needs such as communication with non-English speakers, the halal diet (that which is allowed in Islam), and need for specific hygiene practices, such as wudu (ritual ablution preceding daily prayers) and istinja (washing with free flowing water after urination or a bowel movement).'* (p7)

Such examples are important breaches of patient choice (and might possibly be considered infringement of human rights). The bulk of evidence relates to Muslim patients, though some studies have highlighted similar issues for Hindus and people of other minority religions (Ward and Savulescu, 2006; Chowbey, et al., 2008; Thakrar, Das and Sheikh, 2008; Spitzer, 2003). Though there are examples of good practice in some parts of the country these appear to be largely ad hoc and to depend on the innovation and commitment of particular individuals (Mir and Tovey, 2002). It seems clear that much more needs to be done to mainstream attention to religious beliefs and practices within the health system (Sheikh, 2007).

In addition to ignorance of specific religious preferences and behaviours, it is increasingly argued that the spiritual needs of patients and carers from minority religious groups are not well supported within the NHS (Sheikh, 2007; Sheikh et al., 2004). While this may be a particular concern in certain medical contexts - such as end-of life care, bereavement and prenatal counselling - recent research suggests the significance of religious faith more generally within healthcare for many patients. Mir and Sheikh (2010) found that religious identity influences responses to long-term health conditions among many Pakistani Muslim patients and provides an additional resource distinct from other methods of managing illness. Mir and Sheikh concluded that *'failure to acknowledge and discuss this influence on long-term illness*

*management leads to a vacuum in professional knowledge, inadequate support for patients' decision-making and poor responses to their requests for assistance'* (Mir and Sheikh 2010). It should be remembered, however, that the role and significance of religion varies between individuals both within and across religio-ethnic groups, as will people's preferences for support from health professionals in this area (Spitzer, 2003). Sproston and Bhui (2002) found important variation in the ways in which people from minority ethnic backgrounds with mental health problems drew on religious coping mechanisms. They noted that:

*'Although religion clearly helped some respondents to cope with difficulty, this was by no means a universal experience. On the whole, Muslim respondents had more to say about the role of religion, and offered a greater level of detail in their accounts of this than those in other religious groups did. Among the South Asian groups, there were some similarities between Hindus, Sikhs and Muslims. However, there were clear differences between Black Caribbean respondents' relationship with religion compared with that of South Asian people. Black Caribbean people, unlike most South Asian people, often described their beliefs in a more flexible way when they talked about religion. They tended to voice their views on religion in less certain, or fixed terms. Religious ways of coping featured least in the accounts of White British and Irish respondents' (p47)*

And Mir and Sheikh (2010) also highlight the variation within their sample of Pakistani Muslim respondents, saying that:

*'Diverse attitudes existed, however, and for some respondents religion was unimportant or of marginal significance to health decision-making. Religion was an important value framework for over half the final sample, with primary- or secondary-level influence for a third of patients. However, even amongst this group, the centrality of religious influence varied considerably, superseding any other influence on decision-making for some patients and occupying a more advisory role for others, alongside the influence of family members, health professionals and friends.'*



There is clearly a need for flexible, responsiveness on the part of services and professionals to ensure that the religious and spiritual needs of minority ethnic patients and carers are not prejudged and that there is room for individual choice.

A further important dimension of the health system's contribution to religious health inequalities relates more generally to the way in which people of minority religio-ethnic status are received and treated by actors within the health system. A prevalent theme in research studies is that 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 religious groups, in some cases leading to the withholding of particular interventions or treatments (Mir and Sheikh, 2010; Chowbey, et al., 2008). Despite a growing body of evidence of widespread poor provider behaviour and low levels of patient satisfaction with care, Sheikh (2007) has argued that 'the healthcare profession is still largely in denial about religious discrimination'.

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 Chattoo, 2007; Ahmad 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).

*Wider society: processes of exclusion and discrimination:*

Paradies (2006) has drawn attention to the need for greater precision in the ways in which researchers conceptualise and operationalise indicators of racism and the related notions of ethnic and religious discrimination, victimisation and prejudice in order that the links to health outcomes be better established. Karlsen (2007) has also highlighted the many direct and indirect ways in which racial harassment and discrimination can manifest itself, making the task of assessing the contribution of these processes to poorer health outcomes extremely challenging. Notwithstanding

these complexities, a growing body of findings suggests that processes of religious (and ethnic) exclusion and discrimination make an important contribution to observed inequalities in health (Paradies, 2006).

We report here some quantitative findings from the work of Saffron Karlsen and James Nazroo, as well as some recent qualitative findings. Table 19 shows the proportions of people in each religious group answering 'yes' to three questions about experience and perceptions of discrimination. Black Caribbeans were most likely to answer 'yes' to each of the questions, with Hindus, Sikhs and Muslims having somewhat lower and similar proportions answering 'yes'. Over one in 10 of each of these groups reported that they had experienced victimisation in the past year, and over one in five that they had experienced discrimination at work in the past.

Table 19: Religious and ethnic differences in experiences of racism and perceptions of discrimination, England 1999 and 2004

	<i>Racial victimisation in the past year</i>	<i>Discrimination at work (ever)</i>	<i>Believe half or more British employers discriminate</i>
<b>Christian or no religion</b>			
Irish	8	9	14
Black Caribbean	15	39	38
Indian	6	21	4
<b>Muslim</b>	12	21	19
<b>Sikh</b>	15	21	23
<b>Hindu</b>	11	23	23

Source: EMPIRIC 2000, adapted from Karlsen and Nazroo, (2009a).

Though these figures clearly suggest significant levels of both experienced and perceived discrimination, they are perhaps surprisingly low, particularly for the Muslims. It should be noted, however, that the questions were not specifically worded in terms of 'religious discrimination'. Findings from the Citizenship Survey in 2005 revealed that almost all respondents felt that there was some degree of

religious prejudice in Britain today: 24% thought there was a lot of religious prejudice, 39% thought there was a fair amount, 25% thought there was a little, 5% thought there was none and 7% did not know (Kitchen, Michaelson and Wood, 2005).

Table 20 and Table 20 present findings from multivariate analyses in which the association between indicators of the experience and perception of discrimination and self-reported 'not good' health and common mental disorder respectively, are explored. The top line in Table 20 indicates that among all minorities together, there was a positive association between 'not good' health and each of the three indicators. This means that among minority religio-ethnic individuals as a whole, those who report experiencing or perceiving discrimination/victimisation are more likely to report 'not good' health than those who do not report such discrimination/victimisation. Significantly positive associations were also found among all minority Christians and all non-White Christians, though other differences were not statistically significant.

Table 20: Odds ratios of 'not good' self-reported health by indicators of experience and perception of discrimination

	<b><i>Racial victimisation in the past year</i></b>	<b><i>Believe half or more British employers discriminate</i></b>	<b><i>Either victimised or believe employers discriminate</i></b>
	<u>Age and gender standardised odds-ratio (95% C.I.) compared with those without experience of racism or belief of discrimination</u>		
<b>All minorities</b>	<b>1.70</b> (1.20,2.40)	<b>1.52</b> (1.14,2.03)	<b>1.63</b> (1.24,2.14)
<b>Christian</b>			
All	<b>2.12</b> (1.15,3.93)	<b>2.13</b> (1.34,3.39)	<b>2.12</b> (1.33,3.38)
Irish	1.61 (0.61,4.24)	<b>2.78</b> (1.36,5.68)	<b>2.27</b> (1.12,4.59)
Non-white	<b>3.27</b> (1.85,5.78)	<b>1.78</b> (1.11,2.84)	<b>2.20</b> (1.45,3.34)
<b>No religion</b>	1.61 (0.61,4.24)	1.71 (0.46,6.32)	2.04 (0.58,7.17)
<b>Muslim</b>	1.17 (0.74,1.86)	1.25 (0.77,2.03)	1.31 (0.85,2.02)
<b>Sikh</b>	1.52 (0.69,3.32)	0.68 (0.33,1.39)	1.02 (0.54,1.92)
<b>Hindu</b>	2.36 (0.85,6.55)	1.21 (0.61,2.38)	1.49 (0.81,2.74)

Source: EMPIRIC 2000, adapted from Karlsen and Nazroo (2009a).

In Table 21, we can see that the associations are stronger and more consistent with common mental disorder as the outcome (GHQ12 score 4+). In this case, positive and significant associations were also found for Muslims and Irish Christians across all the indicators and for Sikhs on the first measure.

Table 21: Odds ratios of common mental disorder (GHQ score four or more) by indicators of experience and perception of discrimination

	<b><i>Racial victimisation in the past year</i></b>	<b><i>Believe half or more British employers discriminate</i></b>	<b><i>Either victimised or believe employers discriminate</i></b>
	<u>Age and gender standardised odds-ratio (95% C.I.) compared with those without experience of racism or belief of discrimination</u>		
<b>All minorities</b>	<b>2.27</b> (1.61,3.19)	<b>1.86</b> (1.372,2.53)	<b>2.20</b> (1.66,2.92)
<b>Christian</b>			
All	<b>2.64</b> (1.49,4.68)	<b>2.08</b> (1.29,3.34)	<b>2.44</b> (1.54,3.86)
Irish	<b>2.53</b> (1.04,6.17)	<b>2.44</b> (1.11,5.39)	<b>2.64</b> (1.28,5.42)
Non-white	<b>2.76</b> (1.56,4.90)	<b>1.88</b> (1.22,2.91)	<b>2.41</b> (1.53,3.80)
<b>No religion</b>	0.95 (0.28,3.17)	2.49 (0.81,7.64)	2.50 (0.75,8.34)
<b>Muslim</b>	<b>1.88</b> (1.04,3.37)	<b>1.63</b> (1.03,2.59)	<b>1.93</b> (1.24,3.01)
<b>Sikh</b>	<b>4.38</b> (1.93,9.94)	0.59 (0.22,1.58)	1.56 (0.74,3.32)
<b>Hindu</b>	<b>3.24</b> (1.33,7.90)	1.77 (0.82,3.81)	1.87 (0.93,3.78)

Source: EMPIRIC 2000, adapted from Karlsen and Nazroo (i2009a).

A number of qualitative studies in Great Britain also suggest that the experience and perception of discrimination and victimisation linked to religio-ethnic identity has detrimental effects on people's mental and physical wellbeing. Mir and Sheikh (2010) found that among their respondents many felt that their social status in UK society was adversely influenced by their religious identity, and that '*the perception of exclusion affected respondents' emotional and physical well-being and was related to broader identification with disadvantage and injustice experienced by the Muslim community in general*'.

Female respondent with diabetes (Mir and Sheikh, 2010):

*'When I read all this [news of conflict involving Muslims] I was very upset and even cried. I had a very bad headache all day [...] I am more interested in this kind of news because it is obviously an injustice to us. It's not like it doesn't affect me because it involves you - we are linked to each other'*

Both the qualitative and quantitative evidence suggests that discrimination and negative stereotyping on religious (or ethnic grounds) does not have to be experienced personally for it to have a negative effect on minoritised people's health and wellbeing (Mir and Sheikh, 2010; Karlsen and Nazroo, 2004; Bhui et al., 2005). As the quote above illustrates, the strength of collective identities can mean that people are deeply affected by events and situations that do not directly involve them. Mir and Sheikh (2010) highlighted the important *'dichotomy between the significant personal resource that faith provides and the discrimination that Muslim identity triggers in UK society'*.

Though there is a need for more research that can explain the precise links between discrimination/victimisation, psychosocial wellbeing and health among minority religious, and particularly Muslim, communities, a growing body of evidence suggests that this is a significant part of the explanation for religio-ethnic health inequalities.

*Exclusion from the evidence base:*

Finally, it is worth noting that the lack of research on health experiences and outcomes among different religious groups undoubtedly serves to contribute to the persistent inequalities that have been demonstrated. In the absence of evidence, the scale of disadvantage can not be illustrated, underlying causal processes can not be understood, and appropriate responses can not be developed. Issues that affect particular minority ethnic groups - such as how to manage chronic conditions during fasting - require specialist research for effective solutions to be found. Importantly too, negative stereotypes and discriminatory practices will persist unless they are rigorously documented and exposed.

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