Religious discrimination and common mental disorders in England: a nationally representative population-based study

Vesna Jordanova[1], Mike J. Crawford[2], Sally McManus[3], Paul Bebbington[4], Traolach Brugha[5]

[1] Institute of Psychiatry, Kings College London, UK

[2] Division of Brain Sciences, Imperial College London, UK

[3] National Centre for Social Research, London, UK

[4] Department of Mental Health Sciences, University College London, UK

[5] Department of Health Sciences, University of Leicester, UK

Correspondence: Vesna Jordanova, Bethlem Royal Hospital, Monks Orchard Road, Beckenham, BR3 3BX

email: Vesna.Jordanova@slam.nhs.uk

tel: 00442032280680

fax: 0044 2032286191

Abstract

Purpose

Although the impact of discrimination on mental health has been increasingly discussed, the effect of religious discrimination has not been examined systematically.

We studied the prevalence of perceived religious discrimination and its association with common mental disorders in a nationally representative population-based sample in England.

Methods

We used data from the Adult Psychiatric Morbidity Survey 2007 that represents all adults age 16 years and over living in private households in England. Common mental disorders were ascertained using the Revised Clinical Interview Schedule (CIS-R). Experience of discrimination was assessed by a computer-assisted self-report questionnaire and potential paranoid traits by the Psychosis Screening Questionnaire (PSQ).

Results

From the total of 7318 participants, 3873 (52.4%) reported adhering to religion. 108 subjects (1.5%) reported being unfairly treated in the past 12 months due to their religion. Non-Christian religious groups were more likely to report perceived religious discrimination compared to Christians (OR 11.44; 95% CI 7.36-17.79). People who experienced religious discrimination had increased prevalence of all common mental disorders. There was a two-fold increase in the risk of common mental disorders among people who reported experience of religious discrimination independent of their ethnicity, skin colour or suspected paranoid traits.

Conclusions

The impact of perceived religious discrimination on mental health should be given more consideration in treatment and future preventative policies.

Declaration of interest

None

Keywords:

Religion, discrimination, household survey, common mental disorders

Introduction

The experience of discrimination has been linked to increased psychological distress and poor mental and physical health [1,2]. Most of the research on discrimination has focused on the role of race and ethnicity [3]. Racial and ethnic discrimination is associated with increased psychological distress [4], increased risk for adverse mental health outcomes [5] and poorer general health [2]. However the extent and the impact of religious discrimination on mental health has been largely ignored.

Research on the role of religion in the experience of discrimination has used selective samples of ethnic minorities [1,5], has not used standardized measures of specific types of mental disorders and has not covered the full range of common mental disorders [4]. In a selected population of British Muslims, Sheridan found that levels of religious discrimination rose following the terrorist attacks in the US on 11th September 2001 by 83% [6]. Results suggested that religious affiliation may be a more meaningful predictor of prejudice than race or ethnicity. Padela et al. [7] examined the experience of abuse and discrimination in a population-based sample of Arab American adults. They found high prevalence of personal and familial abuse, negative experiences related to ethnicity and perceptions of not being respected within the US society, with higher rates among Muslims than Christians. These experiences were associated with psychological distress, lower levels of happiness and worse health status.

Rubin et al. [8] examined the level of psychological distress after the London bombing in July 2007. 62% of Muslims reported substantial distress and Muslim religious affiliation showed the strongest association with stress compared to any other demographic variable. The Fourth National Survey of Ethnic Minorities showed significant associations linking reported experience of racism and perception of Britain "as a racist society" with various mental and physical health indicators [9]. However, the possible impact of religious discrimination in the UK general population has not been studied.

Discrimination may be an important risk factor irrespective of skin colour or ethnicity. People from white ethnic background may also be subjected to discrimination on grounds of religious beliefs. Religious affiliation may have a significant impact on mental health independent of ethnic or racial classification. In the climate of globalization it is important to disentangle the influence of religion on experiences of discrimination and its link to mental health.

Our aim was to examine the prevalence and correlates of religious discrimination in a nationally representative population-based sample of adults living in England. We hypothesised that there will be a variation in the prevalence of religious discrimination across religious groups and that these experiences will be associated with common mental disorders, independent of ethnicity, skin colour, and possible paranoid traits.

Method

The National Adult Psychiatric Morbidity Survey in England, carried out in 2007, was designed to be representative of all adults living in private households in England [10]. It employed a stratified two-phase design based on a random probability sample. Postcode sectors (on average 2550 households) were stratified on the basis of a measure of socio-economic status within a regional breakdown. All primary sampling units were stratified on the basis of the proportion of adults in non-manual classes, and sorted by the proportion of households without a motor vehicle based on 2001 Census data. Next, postal sectors were sampled from each stratum with a probability proportional to size. 519 postal sectors were selected, with 28 delivery points randomly selected in each (yielding 14,532 delivery points). Interviewers visited these to identify private households containing at least one person aged 16 and over.

Measures

The survey included standardized questions about age, gender, marital status, ethnic origin, religious beliefs, educational attainment, annual income and employment [10]. Common mental disorders were assessed using the Clinical Interview Schedule-Revised (CIS-R) [11]. The CIS-R is a standardized diagnostic tool covering common mental disorders that has been validated for use in general populations [12]. It provides six ICD-10 diagnostic categories of neurotic disorders, as well as a continuous scale that reflects the overall severity of neurotic psychopathology. Participants also completed the Psychosis Screening Questionnaire, PSQ [13]. Possible paranoid traits were assessed by one PSQ question: “Have you felt that people were against you in past year?”. Experience of discrimination in the past year was assessed in the computer-assisted self-completion section of the interview. Binary variable (yes/no) relating to experience of discrimination was used. A series of questions asked whether the subject had been unfairly treated in the past 12 months on the grounds of age, gender, ethnicity or skin colour, physical illness or disability, mental health, sexual orientation or religion (see Annex). This study focuses on religious discrimination.

Statistical analyses

Survey data were weighted to take account of study design and non-response such that the results were representative in terms of age, sex, region and area characteristics of the household population aged 16 years and over in England. Weighting was necessarily complex, and is described in detail elsewhere [10]. The population control totals used were the Office for National Statistics (ONS) 2006 mid-year household population estimates.

SPSS version 18 was used to analyse the data (SPSS Inc, Chicago, IL, USA). The variables studied are described using the actual numbers and weighted proportions. We analysed the prevalence of ICD-10 neurotic disorders in relation to religious affiliations and the experience of religious discrimination. We used multiple logistic regression models to examine if discrimination is a predictor of common mental disorders independent of other predictors. The following variables were considered as potential confounders: age, sex, ethnicity, skin colour, marital status, education, annual income and paranoid traits. Logistic regression was used to analyse which variables can explain discrimination on grounds of religion and common mental disorders when interactions are taken into account. Subgroup analyses were performed to examine the associations between religious discrimination and common mental disorders among non-white population and people whose religion was other than Christian. Regression models were used to identify potential confounders.

Results

Of the total 7318 participants, 3873 (52.4%) reported adhering to some form of religion, while 3519 (47.6%) reported being atheists. 108 (1.5%) reported being unfairly treated in the past 12 months due to their religion. The experience of discrimination on grounds of religion was more prevalent among younger (age between 16-44 years) than older people (Table 1). Men were almost three times more likely to experience discrimination due to religion than women (OR 2.88, 95% CI 1.88-4.41).

Perceived religious discrimination was more prevalent among South Asians or people with a mixed ethnic background than among British respondents. Non-white people were ten times more likely to report experience of religious discrimination than white participants (OR 10.12; 95% CI 6.86-14.92). It was also more common in those who had A levels/GCSE or equivalent than those with university degrees, and those with annual income in the lowest tertile. Single people were more likely than those

who were married to experience religious discrimination. There was an almost four-fold increase in the prevalence of religious discrimination among people who reported that "people were against them" in the previous year (OR 3.93; 95% CI 2.68-5.77).

The prevalence of perceived discrimination varied significantly according to the type of religion (Table 2). Muslim and Jewish people reported the highest prevalence of religious discrimination, in 17.1% and 15.4% respectively. Overall, people whose religion was "other than Christian" had an eleven-fold increase in the prevalence of perceived discrimination compared with Christians (OR 11.44; 95% CI 7.36-17.79).

People who experienced religious discrimination had a significantly elevated prevalence of all common mental disorders (Table 3). One third had an ICD-10 diagnosis of at least one specific type of neurotic disorder, more than twice the rate in those with no sense of religious discrimination. The prevalence of common mental disorders remained significantly associated with discrimination in non-Christian religious groups, and in those of white or non-white ethnic background.

Anxiety was more strongly associated with perceived religious discrimination than depression. There was no significant increase in the prevalence of depression or panic disorder in the subgroups of non-whites and in non-Christian religious groups (Table 3). The prevalence of OCD was increased among people reporting religious discrimination, but this association was only significant in the total sample.

Table 4 shows the effects of controlling for potential confounders on the association between religious discrimination and common mental disorders. The association remained significant after adjusting for age, sex, race, ethnicity, marital status, education and annual income. In line with our hypothesis, the relationship between discrimination and mental disorders remained significant after controlling for possible paranoid traits. There was an almost three-fold increase in the risk of common mental disorders in members of non-Christian religious groups who reported religious discrimination. However, the strength of the association was similar in Christians, being little affected by the adjustment for potential confounders. The separate adjusted odds ratios for anxiety disorders, depression and panic disorders remained highly statistically significant. However, religious discrimination ceased to be a significant predictor of OCD. The adjusted odds ratios for anxiety disorders remained statistically significant in both Christian and non-Christian religious groups.

Discussion

We found that perceived religious discrimination predicted the likelihood of common mental disorders, even after adjusting for the potential confounding variables. This is the first population-based survey to examine the extent of discrimination on grounds of religion and its association with mental health in a nationally representative random sample.

Strengths and limitations of the study

The main limitation of this study is the issue of reverse causality due to its cross-sectional design, not allowing for casual inferences. The study involved a large sample but this constituted 57% of the eligible subjects. Response rates in household surveys are falling throughout the world [14]. Individuals who have experienced discrimination or those with mental disorders may have been more likely to refuse participation in the study. However, we used detailed weighting procedures to minimise the likelihood of non-response bias and our estimates were weighted to take account of differences between census data and the profile of those who took part in the survey [10]. The ascertainment of discrimination in this household survey was by self-report; therefore the possibility of some reporting bias cannot be excluded. Despite the large sample, the number of people from certain religious groups was relatively low which limited our statistical power in subgroup analyses, particularly evident through wide confidence intervals of associations with specific neurotic disorders.

As far we are aware this is the first study that takes into consideration the potential impact of paranoid traits in people who experience discrimination. We attempted to make adjustments to account for the potential confounding effect of paranoid traits. The study used standardized diagnostic assessment of common mental disorder according to ICD-10 diagnostic criteria. CIS-R is a highly valid diagnostic tool providing continuous measures of mental disorders that are recognized to reflect true population distributions [15].

Correlates of religious discrimination

Religious discrimination is difficult to disentangle from racial and ethnic discrimination. A postal survey by Weller and colleagues [16] found that respondents who experienced unfair treatment often find it difficult to ascribe discrimination into one category or the other. We found that the experience of discrimination due to religion varies between different ethnic and racial groups. However, when

adjusted for ethnicity and race as potential confounders the effect of religious discrimination on mental health remained statistically significant. Religious discrimination relates to belonging to specific religious groups rather than membership of an ethnic group or cultural tradition.

We found that younger people were more likely to experience discrimination on the grounds of religion. This may be explained by higher exposure to social situations associated with possible experience of discrimination e.g. job refusal, limited prospects of job promotion, etc. Religious discrimination is more common among unmarried than married people and men. We found that non-white people report higher levels of religious discrimination than those from white background. This may indicate a cumulative effect of experience of discrimination among non-white people in England. A study investigating the experiences of non-white ethnic minority groups in the UK found that the experience of racism was "part of everyday life" and being made to feel different was largely seen as routine and even expected [17].

Religious discrimination and mental health

Subjects who experienced religious discrimination were more likely to have anxiety disorders than depression. The experience of discrimination may generate a sense of threat causing anxiety-provoking reactions, including negative anticipation, fear, worries and distress [18].

Findings support the perceived discrimination-social stressor hypothesis for genesis of mental health problems in discriminated population (Leibkind et al. 2000) [19]. Perceived loss of control has been found to partially mediate the links between experiences of discrimination and psychological distress among the Arab American populations (Moradi 2004) [20]. The experience of discrimination due to religion may have a direct effect on individual self-esteem and confidence, increasing the negative attributions and vulnerability to mental illness.

The experience of discrimination is a complex phenomenon; it implies not only the occurrence of an objective experience but also an attribution about the reason for that experience [4]. A person may state that they have been discriminated against following direct exposure to hostile behaviour of others. It may also be possible for a person to believe that they have been discriminated against having misread neutral actions and behaviours as being hostile. We used information from Psychosis Screening Questionnaire to try to explore the possible impact of paranoid traits on the experience of

discrimination. The association between reported religious discrimination and mental disorder remained significant after controlling for possible paranoid traits.

Discrimination on the grounds of religion was reported significantly more often by people whose religion was Islam or Judaism. Previous studies indicated that prejudice, discrimination and violence against Muslims and Arabs have increased considerably since September 11th 2001 [6, 8, 21, 22]. Christians were less likely to report unfair treatment than any other non-Christian group. Our findings are consistent with the previous findings from a postal survey in England and Wales indicating that Muslim respondents were the most likely to experience unfair treatment on the grounds of religion [16]. While we don't have data on prevalence of religious discrimination prior to the London bombing in 2005 it is possible that the levels of perceived religious discrimination increased in the aftermath of this event.

Implications

These results are important in expanding our limited knowledge about the incidence and consequences of religious discrimination in the general population. The study indicates that religious discrimination is frequently experienced by people in England and its impact on mental health should be given more consideration in clinical practice. In recent years there has been increased interest in the role of preventative interventions for improving mental health [23]. These have rightly highlighted the discrimination on the grounds of sexual orientation and ethnicity. The results of this study suggest it is also important to include discrimination on the basis of religion when planning such initiatives in the future.

Declaration of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Table 1. Distribution of sociodemographic characteristics and paranoid traits among subjects who perceived religious discrimination

	Religious discrimination (%)	X^2weighted	d.f.	P
Age, years				
16-24	3.2			
25-44	2.2	426.4	8	<0.001
45-64	0.5			
65+	0.4			
Gender				
Male	2.2	25.78	1	<0.001
Female	0.8			
Ethnicity				
White British	0.8	253.0	4	<0.001
White non-British	1.6			
Black	3.6			
South Asian	10.9			
Mixed/other	7.5			
Race				
White	0.8	260.0	1	<0.001
Non-white	7.6			
Highest qualification				
Degree				
A levels/GCSEs/equivalent	1.3	7.59	2	0.022
None	1.9			
	1.0			
Marital status				
Single	2.3	17.98	5	0.002
Divorced/widowed	0.9			
Married/Cohabiting	1.3			
Employment				
Employed	1.7	2.70	1	0.10
Unemployed	1.2			
Annual income				
Highest tertile*	0.7	15.97	2	<0.001
Middle tertile**	1.1			
Lowest tertile***	2.2			
Paranoid traits	3.7	56.70	1	<0.001
Yes	1.0			
No				

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Table 2. Prevalence of perceived religious discrimination across religious groups

Discrimination due to religious beliefs	Protestant n=2112	Roman Catholic n=739	Other Christian n=546	Islam n=216	Judaism n=27	Hindu n=142	Other n=91
Yes (%)	0.9	1.4	1.5	**17.1**	**15.4**	3.6	5.6
No (%)	99.1	98.6	98.5	**82.9**	**84.6**	96.4	94.4

Table 3. Prevalence of psychiatric disorders among people who perceive religious discrimination

Discrimination due to religious beliefs	Depression %	Anxiety disorders %	OCD %	Panic disorder %	Any neurotic disorder %
Total sample of people who hold religious beliefs (n=3873)					
Yes	9.3***	18.7***	3.7**	5.6***	34.6***
No	2.9	6.5	1.1	1.1	15.9
Non-Christians (n=466)					
Yes	4.0	18.0**	4.0	3.9	30.0***
No	3.8	7.7	1.0	1.2	15.1
Christians (n=3376)					
Yes	13.9***	22.2***	-	11.4***	41.7***
No	2.2	6.3		1.1	15.0
White (n=6628)					
Yes	11.5***	15.1**	1.9	7.5***	36.5***
No	2.8	6.2	1.0	0.9	15.6
Non-white (n=721)					
Yes	7.4	20.8**	3.7	3.7	31.5**
No	3.8	9.3	2.0	2.4	18.2

***P<0.005
**P<0.01
*P<0.05

Table 4. Association between perceived religious discrimination and common mental disorders

ICD-10 diagnosis	All Unadjusted OR (95% CI)	All Adjusted OR† (95% CI)	Non-Christian Adjusted OR† (95% CI)	Christian Adjusted OR† (95% CI)
Anxiety Disorders	3.31 (2.03-5.42)***	2.46 (1.34-4.53)***	4.20 (1.46-12.07)**	2.69 (1.04-6.93)*
Depression	3.52 (1.81-6.81)***	2.33 (1.12-5.35)*	2.15 (0.35-13.25)	4.80 (1.57-14.68)**
OCD	3.88 (1.44-10.48)**	1.42 (0.40-5.09)	12.17 (1.00-160.2)*	_
Panic disorder	5.28 (2.22-12.57)***	3.24 (1.19-8.83)**	86.94 (2.04--)	5.16 (1.53-17.39)*
Any neurotic disorder	2.80 (1.88-4.19)***	1.90 (1.11-3.25)*	2.94 (1.14-7.56)**	2.64 (1.11-6.26)*

† Adjusted for age, gender, race, ethnicity, marital status, annual income, education and suspected paranoid traits

***p<0.005
**p<0.01
*p<0.05

ANNEX

1. Have you been unfairly treated in last 12 months due to your skin colour or ethnicity?
2. Have you been unfairly treated in last 12 months due to your sexual orientation?
3. Have you been unfairly treated in last 12 months due to your religious beliefs?
4. Have you been unfairly treated in last 12 months due to your age?
5. Have you been unfairly treated in last 12 months due to your mental health?
6. Have you been unfairly treated in last 12 months due to other health problem or disability?