

**Title:** Beliefs about Jinn, black magic and evil eye in Bangladesh: The effects of gender and level of education

Mullick, M. S. I., Khalifa, N., Nahar, J. S. & Walker, D. M. (2013). Beliefs about Jinn, black magic and evil eye in Bangladesh: The effects of gender and level of education. *Mental Health, Religion and Culture*, 16 (7), pp.719-729.

**Link to repository:**

<https://repository.nottinghamshirehealthcare.nhs.uk/handle/123456789/258>

**Additional information:**

This is an Author's Original Manuscript of an article published by Taylor & Francis in *Mental Health, Religion and Culture* on 24/08/2012, available online:

<https://www.tandfonline.com/doi/full/10.1080/13674676.2012.717918>

**Publisher:** Taylor & Francis

**Version note:**

The version presented here may differ from the published version or from the version of record. If you wish to cite the following item, it is advised to consult the publisher version. Access to the publisher version can be found via the repository URL listed above.

For more information about this article, or the research repository, please contact

[repository@nottshc.nhs.uk](mailto:repository@nottshc.nhs.uk)

**Please cite the published version**

**Nottinghamshire Healthcare NHS Foundation Trust**

Institutional Repository

[repository.nottinghamshirehealthcare.nhs.uk](https://repository.nottinghamshirehealthcare.nhs.uk)

Running head: Beliefs about Jinn, black magic and Evil eye in Bangladesh

## **Beliefs about Jinn, black magic and evil eye in Bangladesh: the effects of gender and level of education**

### **Authors**

**Mohammad S I Mullick** PhD, **FRCPsych**, FCPS (Psychiatry), DCAP  
Professor and Chairman  
Department of Psychiatry  
Bangabandhu Sheikh Mujib Medical University (BSMMU)  
Dhaka 1000, Bangladesh  
Tel: +880 (2) 8626154; Fax: +880 (2) 8624187  
Email: [msimullick@gmail.com](mailto:msimullick@gmail.com)

**Najat Khalifa** MBChB, MRCPsych, DM  
Consultant Forensic Psychiatrist  
Nottinghamshire Healthcare NHS Trust  
Wells Road Centre, Nottingham, NG3 3AA  
Tel: +44 (115) 9691300; Fax: +44 (115) 9529420  
Email: [najat.khalifa@nottshc.nhs.uk](mailto:najat.khalifa@nottshc.nhs.uk)

**Jhunu S Nahar**, FCPS (Psychiatry)  
Professor of Psychotherapy  
Department of Psychiatry  
Bangabandhu Sheikh Mujib Medical University (BSMMU)  
Dhaka 1000, Bangladesh  
Tel: +880 (2) 9675656; Fax: +880 (2) 8624187  
Email: [jsnabar@gmail.com](mailto:jsnabar@gmail.com)

**Dawn-Marie Walker** PhD  
The Research Design Service for the East Midlands  
14th. Floor, Tower Building  
University of Nottingham, Nottingham NG7 2RD  
Tel: + 44 (115) 82 30511; Fax: + 44 (115) 82 30501  
Email: [Dawn-marie.Walker@nottingham.ac.uk](mailto:Dawn-marie.Walker@nottingham.ac.uk)

**Key words:** Jinn, black magic, evil eye, transcultural psychiatry, culture and mental health-Bangladesh

**Word count:** 5, 337

**Conflict of interests:** None

## **Abstract**

The present study aims to expand the knowledge regarding beliefs about Jinn, black magic and evil eye among Muslims in Bangladesh and whether they believe that these could cause mental health problems and who they think are best placed to treat them; doctors, religious figures or both (working together) and the effects of gender and level of education on these beliefs. It is hypothesized that their belief in Jinn, black magic and evil eye will correlate positively with a low education and being female. Using a self completed questionnaire, we examined these beliefs among attendees of a large University Hospital in Dhaka, the capital of Bangladesh.

Of the 320 individuals who participated in the study, the majority believed in the existence of Jinn (72%) and in Jinn possession (61%). In contrast, a relatively smaller proportion believed in the existence of black magic and evil eye (50% and 44% respectively). Women were more likely than men to believe in the existence of Jinn and to cite religious figures as the treating authority for diseases attributed to affliction by black magic. Participants with a higher educational attainment were less likely than those with lower attainment to believe in jinn possession; or to believe that Jinn, black magic, or evil eye could cause mental health problems. And, those with lower educational attainments had stronger beliefs in religious figures being suitable for treating the affliction.

Our results show that supernatural explanations are not uncommon at times of distress amongst Bangladeshi Muslims. Mental health care practitioners need to be mindful of these beliefs, allow patients to express their views about illness causation and be prepared to work with religious figures, if necessary, to achieve the best outcome for their patients.

## Introduction

Muslims believe in the existence of three separate, but parallel, worlds: Mankind, Angels (messengers of God) and Jinn. According to the Islamic belief, Jinn are creatures who conceal themselves from Mankind, so they see us but they cannot be seen. Jinn have the same needs as Mankind; they eat, drink, procreate, reproduce and die (Al-Ashqar, 2003). The widely accepted belief amongst Muslims is that Jinn are capable of causing physical and mental harm through possession (Khalifa & Hardie, 2005), which is when an individual has been entered by an alien spirit which then controls the person (Littlewood, 2004; Dein, 1997). Some Muslims also believe in black magic and evil eye (Khalifa, Hardie, Latif, Jamil & Walker, 2011).

There are numerous references to black magic and evil eye in the Islamic literature. Black magic refers to the claimed ability to alter things by supernatural means with the intention of causing harm or destruction. Evil eye refers to the ability mankind has to inflict harm on others either mentally or physically by giving them an envious glance (Dein, Alexander & Napier, 2008). However, the extent to which beliefs about Jinn, black magic and evil eye can affect health behaviour among Muslims remains contentious (Dein et al, 2008).

In the Arabic World, where the majority are Muslims, the belief that Jinn can enter the human body and cause mental illness is widely accepted, with symptoms such as forgetfulness, lack of energy and morbid fears being commonly attributed to Jinn and evil eye (El-Islam, 1995). However, patients displaying psychiatric symptomatology who believe they are possessed by Jinn, usually have underlying physical or mental health problems (Bayer & Shunaigat, 2002). These authors also found that the majority of their participants were young, uneducated, unemployed,

males. The correlation between education and belief in Jinn has been supported by other studies such as Dein et al. (2008). It is also seen that 'higher caste' people showed greater belief in natural causes of mental illness than spiritual reasons (Kakar, 1988), which could be arguably linked, amongst other factors, to education. Further, a study of beliefs about psychosis and marital instability among Nigerian immigrants in USA, Olusesi (2008) found that participants with highest level of education (post graduate level) were less likely to believe in supernatural causations for psychosis and marital instability than those with lower levels of education.

Looking at the broader international Muslim perspective, Khalifa and colleagues (2011) examined beliefs about Jinn, black magic and evil eye of Muslims in the United Kingdom. They found that almost half of the participants believed in the existence of the Jinn, black magic and evil eye, with significantly more women believing in evil eye and black magic than men. Although fewer participants believed in possession, the majority of the sample believed that Jinn and black magic could cause mental illness, whilst they attributed physical illness to evil eye. This finding in a Muslim UK population has been supported by other studies. For instance, Dein et al (2008) in their study of notions of misfortune among Bangladeshi community in East London found that belief in Jinn possession was not uncommon at times of psychological distress especially when coping with unexplained physical symptoms.

Regarding mental health, psychological difficulties such as anxiety or depression, are often regarded as indicative of an unsound spiritual heart by some Muslims (Weatherhead & Daiches, 2010) and that mental illness can be due to either a defective relationship with God, as punishment from him (Al-Krenawi & Graham, 1999) or due to a lack of faith or praying (Weatherhead & Daiches, 2010). Psychosis, however, is regarded as an organic disorder and more serious than mood disorders,

therefore less controllable by the person, which may lead to more acceptance in accessing mental health care (Weatherhead & Daiches, 2010). This can lead to conflict between orthodox medicine and religiosity as surmised in a paper by Cinnirella and Loewenthal (2001): depression may be denied as believed to be impossible in a truly religious person; patients may use a range of religion based coping strategies without telling their doctor; and there may be distrust amongst religious sources regarding psychotherapists and psychiatrists. These factors lead to low referral rates of Muslims to mental health care (Aloud, 2004), particularly in the UK Pakistani population (Cochrane, 1983). However this may also be due to the effectiveness of support amongst the Muslim Community (Cinnirella & Loewenthal, 1999). Muslims appear to be underrepresented in voluntary accessed services, such as counseling or outpatient care (Weatherhead & Daiches, 2010) with formal services only being accessed at critical times. Perceptions of honor appear to play a role in this decision process, and seeking help is a sign of weakness by other members of the community, which in turn affects one's reputation (Weatherhead & Daiches, 2010). This lack of self-referral or asking for help at an early stage, leads to a poorer prognosis, which in turn, results in over representation of black and ethnic minority groups in non-voluntary services such as in-patient care under mental health legislation (Weatherhead & Daiches, 2010) due to crisis being reached before help is sought.

Muslims may believe that religious interventions such as reciting the Qur'an can cure emotionally disturbed people (Abu-Ras & Abu-Bader, 2008), therefore may deter them from accessing primary care. This is a particular problem for Muslim women who are more likely to seek help from relatives or religious leaders (Abu-Ras & Abu-Bader, 2008) mainly due to lack of financial freedom, or familiarity with

services (Abu-Ras, 2003; 2007). While religiosity can help prevent mental illness, as religious Muslims self-report better mental health than non-religious Muslims (Abdel-Khalek, 2007; 2008), this could reflect reluctance to report that they had poor mental health due to stigma of poor religiosity.

The present study aims to further expand the knowledge regarding beliefs about Jinn or other supernatural entities among Muslims in Bangladesh and whether they believe that these could cause mental health problems and who they think are best to treat them; doctors, religious figures or both (working together) and the effects of gender and level of education on these beliefs. Based upon previous literature it is hypothesized that there will be a correlation between belief in Jinn, evil eye and black magic with a low education and being female.

Bangladesh lays in the north-eastern part of South Asia, with a geographical area of 1, 47,570 sq km and a population estimate of 156 million. Bangladesh is largely homogeneous in regards to ethnicity (Asiatic Society of Bangladesh, 2010), with most of its population being working age, i.e. 61% aged between 15-64 years. Of these the gender ratio is 0.9/1.0 male/female. Literacy rates are 53% and 45% for men and women respectively. Islam is the most commonly practiced religion with 90% of the population describing their religion as Muslim (Bangladesh Bureau of Statistics, 2004).

## **Method**

### **Setting**

The current study was conducted in Dhaka, the capital of Bangladesh. The population of Dhaka is 10,712,206; with 56% males and 43% females. The average literacy rate in Dhaka is about 65% which is higher than the general population of

Bangladesh. The literacy rate in Dhaka is higher amongst males than females; 70% and 60 % respectively (Bangladesh Bureau of Statistics, 2004).

### Participants

Muslims aged 18 and over who were accompanying patients to various medical outpatient departments of the Bangabandhu Sheikh Mujib Medical University (BSMMU) Hospital, Dhaka, a tertiary University hospital which accepts referrals from all parts of Bangladesh.

### Procedure

Research ethics approval to conduct the study was obtained from the relevant authority at Bangabandhu Sheikh Mujib Medical University in Dhaka. Participants were approached at random by using the outpatient attendees register as the sampling frame. Data was collected by a postgraduate trainee attached to the Department of Psychiatry with a background in psychology and sociology, after they were adequately trained in data collection by the first author. After explaining the study and obtaining informed consent, participants were invited to complete the questionnaire which was self administered. However, for those who self reported as having an inability to read or write, (n=12), the questions were read out to them and their answers were recorded by the postgraduate trainee.

### The questionnaire

The questionnaire was adapted from a previous study conducted in the UK (Khalifa, et al., 2011). The original questionnaire had four sections (a copy can be obtained from the authors). The first section collected demographic information

including gender, age, marital status and employment status. The second section was regarding beliefs about Jinn, black magic and evil eye. Participants were asked whether these existed in reality, and whether they could cause mental health difficulties. The third section assessed views on whether medical doctors, religious figures, i.e. Alem, Hakim, Mullah, or Imam, or both working together should treat health problems. In relation to the treating authority, participants could endorse as many options as they felt were appropriate. Finally, space was provided at the end of the survey where respondents could write anything they wished to add.

The original questionnaire was modified by adding items concerning the levels of education, income and the provision of open ended questions for participants to elaborate if they so wished. Level of income was categorised into three bands based upon the classification used by the Bangladesh Bureau of Statistics (2009): Low income, i.e. less than 10,000 Taka (US\$ 100) per month; Middle income, i.e. 10,000-20,000 Taka (US\$ 140-280) per month; and high income, i.e. over Taka 20,000 (US\$ 280) per month. The level of education was categorised into three groups based on the last school attended; primary or below, secondary, or higher.

The questionnaire was translated into Bangla by the first author (MM). Great care was taken to ensure that the translation was culturally sensitive, for example, by using only those words and idioms that would be readily understood by all Bangla speakers, irrespective of their social or educational backgrounds. In this study, all open-ended comments were translated from Bangla into English by the first author (MM).

## Analyses

The data was analysed using descriptive statistics and comparison of beliefs by gender and level of education was conducted using non-parametric statistics. Multinomial logistic regression was used to examine effects of gender and level of education (predictor variables) on belief systems (outcomes variables) which were entered individually into the regression equation.

## Results

A total of 326 individuals were approached, of whom five refused to participate, giving a response rate of more than 98%. Data cleaning was performed by ranking data according to their variables to look for any obvious keystroke errors, also to detect any missing data. Where any query arose, the original document would be cross referenced with the data set. As a result of data cleaning, one participant was excluded because of incomplete data. Therefore, the final sample comprised of 320 participants on whom a full set of data was available for analysis.

Sample characteristics are summarised in table 1. In brief, the majority were aged between 18 and 30 (50%), married (60%), and employed (52%). Regarding income and education, more than 75% of participants were of middle income and about 40% of them had completed higher education.

Table 1: Sample characteristics

	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>
	(N=195)	(N=125)	(N=320)

<b>Age group</b>			
18-30	97	63	160
31-40	53	35	88
41-50	24	19	43
51-60	19	7	26
>60	2	1	3
<b>Marital status</b>			
Married	108	82	190
Single	86	32	118
Divorced/separated/widowed	1	11	12
<b>Employment status</b>			
Employed	143	24	167
Unemployed	6	5	11
Student	36	27	63
Home maker	0	64	64
Retired	10	5	15

<b>Level of education</b>			
Primary or below	37	52	89
Secondary	63	42	105
Higher	95	31	126
<b>Level of income</b>			
Lower	32	30	62
Middle	159	89	248
Higher	4	6	10

As can be seen in table 2, the majority believed in the existence of Jinn (72%) and in Jinn possession (61%). In contrast with this, a relatively smaller proportion believed in the existence of black magic and evil eye (50% and 44% respectively). Females were more likely than males to believe in Jinn ( $p=0.046$ ), Jinn possession ( $p=0.003$ ) and evil eye ( $p<0.001$ ). Also, females were more likely than males to cite religious figures as the treating authority for diseases attributed to affliction by black magic ( $p=0.037$ ) and evil eye ( $p=0.001$ ) but not Jinn.

Table 2: Beliefs about Jinn, Black Magic and Evil Eye: comparison by gender

	Male (total=195)			Female (total=125)			Statistics
	n (%)			n (%)			
	Yes	No	DK	Yes	No	DK	
<b>Belief in Jinn</b>	133 (68)	59 (30)	3 (2)	99 (79)	23 (18)	3 (3)	LR=5.92, p=0.046*
Jinn possession	105 (54)	79 (40)	11 (6)	91 (73)	29 (23)	5 (4)	$\chi^2=11.64$ , p=0.003*
Jinn causing MHD	74 (38)	98 (50)	23 (12)	68 (54)	45 (36)	12 (10)	$\chi^2=8.44$ , p=0.015*
RF treating Jinn affliction	102 (52)	75 (38)	18 (10)	76 (61)	36 (29)	13 (10)	$\chi^2=3.14$ , p=0.208
Doctors treating Jinn affliction	68 (35)	96 (49)	31 (16)	37 (30)	74 (59)	14 (11)	$\chi^2=3.26$ , p=0.195
Doctors & RF treating Jinn affliction	63 (32)	98 (50)	34 (18)	43 (34)	55 (40)	27 (22)	$\chi^2=1.41$ , p=0.492

<b>Belief in black magic</b>	92 (47)	97 (50)	6 (3)	69 (55)	53 (42)	3 (3)	$X^2=1.97, p=0.373$
BM causing MHD	72 (37)	99 (51)	24 (12)	59 (47)	50 (40)	16 (13)	$X^2=3.87, p=0.114$
RF treating BM affliction	71 (36)	98 (50)	26 (14)	63 (50)	46 (37)	42 (13)	$X^2=6.64, p=0.037^*$
doctors treating BM affliction	60 (31)	109 (56)	26 (13)	38 (30)	71 (57)	16 (13)	$X^2=0.031, p=0.985$
Doc & RF treating BM affliction	48 (25)	115 (59)	32 (16)	33 (26)	69 (55)	23 (19)	$X^2=0.46, p=0.795$
<b>Belief in EE</b>	69 (35)	119 (61)	7 (4)	72 (58)	48 (38)	5 (4)	$X^2=16.03, p<0.001^*$
EE causing MHD	40 (20)	126 (65)	29 (15)	29 (23)	71 (57)	25 (20)	$X^2=2.19, p=0.33$
RR treating EE affliction	61 (31)	103 (53)	31 (16)	64 (51)	43 (34)	18 (15)	$X^2=13.51, p=0.001$
Doctors treating EE affliction	64 (33)	104 (53)	27 (14)	40 (32)	68 (54)	17 (14)	$X^2=0.035, p=0.983$
Doc & RF treating BM affliction	48 (25)	113 (58)	34 (17)	34 (27)	64 (51)	27 (22)	$X^2=1.51, p=0.486$

* significant at 0.05 LR=Likelihood ratio RF=religious figures MHD=mental health difficulties BM=black magic EE=evil eye							

Regarding level of income, only a small proportion of participants fell in the higher income category (n=10), therefore it was not possible to draw valid conclusions from analyses using level of income as a covariate. However analyses regarding the effect of education ( table 3) showed that participants with a higher educational attainment were less likely than the other 2 groups (primary or below, or secondary education) to believe in Jinn possession, or to believe that Jinn, black magic, or evil eye could cause mental health problems. It also appeared that those with lower educational attainment had stronger beliefs in religious figures being suitable for treating the affliction.

Multinomial logistic regression was conducted using gender and level of education as predictor variables and belief systems (entered individually) as outcome variables. For each outcome variable tested Goodness-of-fit test was used to assess whether the gender+level of education model gave adequate predictions. Those models that outperformed the null model are summarised in table 4.

As can be seen, female gender predicted beliefs in Jinn possession and evil eye and responses advocating religious figures as the treating authority for mental health difficulties attributed to evil eye affliction. A low education predicted beliefs in Jinn possession and evil eye; beliefs that evil eye and black magic could cause mental health difficulties; and belief that religious figures were best placed at treating affliction by supranatural entities.

Table 3: Beliefs about Jinn, black magic and evil eye; comparison by level of education

	Level of education									Statistics
	Primary or below (total=89)			Secondary (total=105)			Higher (total=126)			
	n (%)			n (%)			n (%)			
	Yes	No	DK	Yes	No	DK	Yes	No	DK	
<b>Belief in Jinn</b>	65 (73)	22 (25)	2 (2)	84 (80)	19 (18)	2 (2)	83 (66)	41 (32)	2 (2)	LR=6.48, p=0.166
Jinn possession	67 (75)	21 (24)	1 (1)	74 (70)	29 (28)	2 (2)	55 (44)	58 (46)	13 (10)	$\chi^2=32.02$ , p<0.001*
Jinn causing MHD	48 (54)	25 (28)	16 (18)	56 (53)	44 (42)	5 (5)	38 (30)	74 (59)	14 (11)	$\chi^2=38.29$ , p<0.001*
RF treating Jinn affliction	62 (70)	17 (19)	10 (11)	64 (61)	36 (34)	5 (5)	52 (41)	58 (46)	16 (13)	$\chi^2=32.29$ , p<0.001*
Doctors treating Jinn affliction	23 (26)	51 (57)	15 (17)	41 (39)	54 (51)	10 (10)	41 (33)	65 (52)	20 (16)	$\chi^2=5.29$ , p=0.258
Doc & RF treating Jinn affliction	32 (36)	40 (45)	17 (19)	34 (32)	55 (53)	16 (15)	40 (32)	58 (46)	28 (22)	$\chi^2=2.46$ , p=0.651

<b>Belief in BM</b>	52 (59)	35 (39)	2 (2)	58 (55)	46 (44)	1 (1)	51 (40)	69 (55)	6 (5)	$\chi^2=10.15, p=0.035^*$
BM causing MHD	48 (54)	23 (26)	18 (20)	47 (45)	50 (47)	8 (8)	36 (29)	76 (60)	14 (11)	$\chi^2=15.01, p=0.001^*$
RF treating BM affliction	54 (61)	21 (23)	14 (16)	46 (44)	50 (47)	9 (9)	34 (27)	73 (58)	19 (15)	$\chi^2=30.67, p<0.001^*$
Doctors treating BM affliction	25 (28)	50 (56)	14 (16)	38 (36)	55 (52)	12 (12)	35 (28)	75 (59)	16 (13)	$\chi^2=2.81, p=0.59$
Doc & RF treating BM affliction	26 (29)	43 (48)	20 (23)	28 (26)	64 (61)	13 (13)	27 (21)	77 (61)	22 (18)	$\chi^2=6.03, p=0.197$
<b>Belief in EE</b>	56 (63)	30 (34)	3 (3)	49 (47)	53 (50)	3 (3)	36 (28)	84 (67)	6 (5)	$\chi^2=25.75, p<0.001^*$
EE causing MHD	26 (29)	34 (38)	29 (33)	28 (26)	64 (61)	13 (13)	15 (12)	99 (78)	12 (10)	$\chi^2=41.25, p<0.001^*$
RF treating EE affliction	54 (61)	18 (19)	17 (20)	40 (38)	55 (52)	10 (10)	31 (24)	73 (58)	22 (18)	$\chi^2=38.74, p<0.001^*$
Doctors treating EE affliction	30 (34)	43 (48)	16 (18)	34 (32)	60 (57)	11 (11)	40 (32)	69 (55)	17 (13)	$\chi^2=2.78, p=0.595$
Doc & RF treating EE affliction	28 (32)	36 (40)	25 (28)	25 (24)	65 (62)	15 (14)	29 (23)	76 (60)	21 (17)	$\chi^2=12.04, p=0.01^*$

<p>* significant at 0.05</p> <p>LR=Likelihood ratio; RF=religious figures; MHD=mental health difficulties; BM=black magic; EE=evil eye</p>	
--	--

Table 4: Multinomial logistic regression analysis

Belief systems*	Predictor variables	B	OR (95% CI)	Sig.
Belief in Jinn possession	Female gender	0.61	1.8 (1, 3.1)	0.023**
	Lower education	0.96	2.6 (1.4, 4.9)	0.003**
Jinn causing MHD	Female gender	0.4	1.5 (0.9, 2.5)	0.115
	Lower education	1.1	3.2 (1.7, 6.2)	<0.001**
RF treating Jinn affliction	Female gender	0.11	1.1 (0.6, 1.8)	0.661
	Lower education	1.36	3.9 (1.9, 7.6)	<0.001**
BM causing MHD	Female gender	0.14	1.1 (0.6, 1.9)	0.593

	Lower education	1.48	4.3 (2.2, 8.5)	<0.001**
RF treating BM affliction	Female gender	0.24	1.2 (0.7, 2.1)	0.359
	Lower education	1.59	4.9 (2.5, 9.5)	<0.001**
Belief in EE	Female gender	0.67	1.9 (1.2, 3.2)	0.007**
	Lower education	1.27	3.5 (1.9, 6.6)	<0.001**
EE causing MHD	Female gender	-0.1	0.9 (0.4, 1.6)	0.731
	Lower education	1.62	5 (2.3, 10.9)	<0.001**
RF treating EE affliction	Female gender	0.57	1.7 (1, 3)	0.033**
	Lower education	1.78	5.9 (2.9, 11.9)	<0.001**
<p>* the reference category is: No.  ** significant at 0.05  RF=religious figures  MHD=mental health difficulties  BM=black magic  EE=evil eye</p>				



## **Discussion**

The majority of the present sample believed in the existence of Jinn, with a relatively smaller proportion believing in the existence of black magic and evil eye. This may be related to the fact that the Islamic literature (including Qur'an) put more emphasis on Jinn than the other 2 entities. For instance, Jinn is mentioned in 29 different sites in the Qur'an whereas, black magic and evil eye are mentioned only a few times. Furthermore, some scholars regard believing in the existence of Jinn as a part of the Islamic faith but opinions differ in relation to belief in black magic and evil eye.

With regards to gender, females were more likely than males to believe in the existence of Jinn and evil eye, which supports earlier research (Khalifa et al, 2011). They were also more likely than males to cite religious figures as the treating authority for diseases attributed to affliction by black magic. However, these results are compounded by the fact that females had lower educational attainment in general. Gender disparity in regards to access to health care and education is not uncommon in South Asia (Fikree & Pasha, 2004). It may also be related to confounding factors - such as religiosity and history of mental health difficulties among participants – or to prestige bias which may occur if participants answer questions in the way they think the questioner wants them to answer rather than according to their true beliefs.

Our findings showed that participants with a higher educational attainment were less likely than the other 2 groups (primary or below, or secondary education) to believe in jinn possession; to believe that Jinn, black magic, or evil eye could cause mental health problems; or to cite religious figures as the treating authority for

diseases thought to be attributed to Jinn, black magic, or evil eye. This is not surprising as in Muslim countries; it is often the Imam who treats mental health problems. However, these people wouldn't qualify for counselling certification due to a lack of formal counselling qualifications (Haque, 2004).

Our findings may indicate that those with higher education attainment are more attuned to accepting medical explanations for diseases, or that they are more likely to be able to delineate religion from science. The link between 'modernity' and tradition is complex in Islam. Dein et al (2008) examined the notion of Jinn and misfortune among Bangladeshis in east London, one of most deprived areas in the UK with high indices of social disadvantage, and reported that belief in Jinn was common place. And that most participants believed that fate was largely influenced by external factors that were outside their control of which Jinn was cited as an example. Dein et al (2008) argued that education does not necessarily transform beliefs about illness causation of and healing in a globalized world. Wider economic, social and cultural factors have a highly significant impact on these beliefs.

To our knowledge, this study is the first that explored beliefs about Jinn, black magic and Evil eye in Bangladesh. However, the study has a number of limitations. First, the sample size was relatively small. Second, the study was conducted in a single centre in Dhaka which means that the sample may not be representative of Muslim beliefs as a whole. Therefore, the results cannot be generalised to all Muslims in Bangladesh. Third, the use of an invalidated questionnaire is a major limitation of this study. However, it must be noted that validating this type of questionnaires is difficult as prestige bias may occur if participants answer questions in the way they think the questioner wants them to answer rather than according to their true beliefs. Fourth, while translation had the advantage of allowing non English

Speaking participants to participate in the study, back translation would have been preferable. Finally, lack of information about history of mental health difficulties among participants can be seen as a limitation as history of such difficulties may have influenced beliefs about supernatural entities.

## **Conclusions**

Our results deserve attention from practitioners in the field of mental health care. Practitioners need to be mindful that beliefs about Jinn, black magic and evil eye are not uncommon among Muslim. Also that appeal to supernatural explanations is not uncommon at times of distress in general. It seems sensible therefore for practitioners to allow patients to express their views about illness causation without condemning these beliefs, although the underlying psychiatric disorders should be treated using conventional medical methods. Furthermore, practitioners need to be prepared to seek the help of religious leaders if necessary or requested. Religious figures may help shed more light on the religious aspects of a patient's presentation. Although knowledge and respect of the Muslim religion is important, a health professional of the same religion may cause the patient to feel that details of their condition may be disseminated amongst their community (Cinnirella & Loewenthal, 1999). Muslims who seek mental health care prefer counsellors with an understanding of Islam (Weatherhead & Daiches, 2010; or their culture race (Kelly, 1996) and treated with a combined care package consisting of Qur'anic health and Western medicine (Abu-Ras & Abu-Bader, 2008; Kelly, 1996), however they may instead prefer using private prayer rather than an Imam (Weatherhead & Daiches, 2010).

Although religious leaders are often the first-line mental health care providers to Muslims (Osman, Milstein & Marzuk, 2005) they are not trained to be a referral agent into conventional medicine, which often leaves the patient receiving inadequate psychiatric assessments or treatments (Budman, Lipson, & Meleis, 1992). Liaison between the Muslim communities and mental health services should be therefore encouraged.

Further research is needed to confirm the prevalence of the beliefs in Bangladesh and examine the relationship between patients' explanatory models of illness causation, and outcome from health services. Furthermore, the issues which arise out of conventional mental health services working collaboratively with religious figures deserve further attention, in particular in relation to identifying potential pitfalls and models of good practice.

### **Acknowledgements**

We thank all participants for their help and cooperation.

### **References**

- Abdel-Khalek, A.M. (2007). Religiosity, happiness, health, and psychopathology in a probability sample of Muslim adolescents. *Mental Health, Religion & Culture*, 10 (6), 571 - 583.
- Abdel-Khalek, A.M. (2008). Religiosity, health and well-being among Kuwaiti personnel. *Psychological Reports*, 102 (1), 181-184.

- Abu-Ras, W. (2003). *Barriers to Services for Arab Immigrant Battered Women in a Detroit Suburb. Journal of Social Work Research and Evaluation*, 4 (1), 49-66.
- Abu-Ras, W. (2007). Cultural Beliefs and Service Utilization by Battered Arab Immigrant Women. *Violence Against Women*, 13(10), 1002-1028.
- Abu-Ras, W., & Abu-Bader, S.H. (2008). The impact of the September 11, 2001, attacks on the well-being of Arab Americans in New York City. *Journal of Muslim Mental Health*, 3, 217-239.
- Al-Ashqar, U. S. (2003). *The world of the Jinn & devils in the light of the Qur'an and Sunnah*. Islamic Creed Series, Volume 3. Columbia, NC: International Islamic Publishing House.
- Al-Krenawi, A., & Graham, J.R. (1999). *Social work and Koranic mental health healers*. *International Social Work*, 42(1), 53-65.
- Aloud, N. (2004). *Factors affecting attitudes toward seeking and using normal mental health and psychological services among Arab-Muslims population*. Ohio State University.
- Asiatic Society of Bangladesh. (2010). *Banglapedia: National Encyclopaedia of Bangladesh*. Retrieved on 14 September 2010 from;  
[http://www.banglapedia.org/httpdocs/HT/B\\_0141.HTM](http://www.banglapedia.org/httpdocs/HT/B_0141.HTM)
- Bangladesh Bureau of Statistics. (2004). *National Accounts Statistics (Provisional Estimates of GDP, 2003-04 and Final Estimates of GDP, 2002-03)*. Dhaka: Bangladesh Bureau of Statistics.
- Bangladesh Bureau of Statistics. (2009). *Statistical yearbook of Bangladesh*. Bangladesh Bureau of Statistics: Dhaka.

- Bayer, R.S., & Shunaigat, M. (2002). Socio-demographic and clinical characteristics of possessive disorder in Jordan. *Neuroscience*, 7(1):46-49.
- Budman, C.L., Lipson, J.G., & Meleis, A.I. (1992). The cultural consultant in mental health care: the case of an Arab adolescent. *American Journal of Orthopsychiatry*, 62 (3), 359-370.
- Cinnirella, M., & Loewenthal, K.M. (1999). Religious and ethnic group influences on beliefs about mental illness: a qualitative interview study. *British Journal of Medical Psychology*, 72 (4), 505-524.
- Cochrane, R. (1983). *The social creation of mental illness*. London: Longman.
- Dein, S. (1997). ABC of mental health: Mental health in a multiethnic society. *BMJ*, 315, 473-476.
- Dein, S., Alexander, M., Napier, A. D. (2008). Jinn, Psychiatry and contested notions of misfortune among East London Bangladeshis. *Transcultural Psychiatry*, 35 (1), 31-55.
- El-Islam, M.F. (1995). Cultural aspects of illness behaviour. *The Arab Journal of Psychiatry*, 6:13-18.
- Fikree, F.F., and Pasha, O. (2004). The role of gender in health disparity: the South Asian context. *BMJ*, 328: 823-826.
- Haque, A. (2004). Religion and Mental Health: The Case of American Muslims. *Journal of Religion and Health*, 43 (1), 45-58.

- Hassouneh, D.M., & Kulwicki, A. (2007). Mental health, discrimination, and trauma in Arab Muslim women living in the US: A pilot study. *Mental Health, Religion & Culture*, 10 (3), 257 – 262.
- Kakar, D.N. (1988). *Primary health care and traditional medicine.*, ed. Sterling, New Dehli.
- Khalifa, N., & Hardie, T. (2005). Possession and Jinn. *Journal of Royal Society of Medicine*, 98, 351–3.
- Khalifa, N., Hardie, T., Latif, S., Jamil, I., & Walker D.M. (2011). Beliefs about Jinn, Black Magic and Evil Eye among Muslims: age, gender and first language influences. *International Journal of Culture and Mental Health*, 4 (1), 68-77.
- Kelly, E.W.J. (1996). Muslims in the United States: An exploratory study of universal and mental health questions. *Counseling & Values*, 40, 206-219.
- Littlewood R (2004). Possession states. *Psychiatry*, 3, 8–10.
- Olusesi, O. A. (2008). *The relationship between causal beliefs about mental illness and marital instability, and help seeking preferences of Nigerian immigrants* (Doctoral Dissertation). New York University School of Social Work, USA.
- Osman, M.A., Milstein, G., & Marzuk, P.M. (2005). The Imam's role in meeting the counselling needs of Muslim communities in the United States. *Psychiatric Services*, 56 (2), 202-205.
- Weatherhead, S., & Daiches, A. (2010). *Muslim views on mental health and psychotherapy. Psychology and Psychotherapy: Theory, Research and Practice*, 83, 75-89.

Table 1: Sample characteristics

	<b>MALE</b> (N=195)	<b>FEMALE</b> (N=125)	<b>TOTAL</b> (N=320)
<b>Age group</b>			
18-30	97	63	160
31-40	53	35	88

41-50	24	19	43
51-60	19	7	26
>60	2	1	3
<b>Marital status</b>			
Married	108	82	190
Single	86	32	118
Divorced/separated/widowed	1	11	12
<b>Employment status</b>			
Employed	143	24	167
Unemployed	6	5	11
Student	36	27	63
Home maker	0	64	64
Retired	10	5	15
<b>Level of education</b>			
Primary or below	37	52	89
Secondary	63	42	105
Higher	95	31	126
<b>Level of income</b>			
Lower	32	30	62
Middle	159	89	248
Higher	4	6	10

Table 2: Beliefs about Jinn, Black Magic and Evil Eye: comparison by gender

	Male (total=195) n (%)			Female (total=125) n (%)			Statistics
	Yes	No	DK	Yes	No	DK	
<b>Jinn</b>	133 (68)	59 (30)	3 (2)	99 (79)	23 (18)	3 (3)	LR=5.92, p
ession	105 (54)	79 (40)	11 (6)	91 (73)	29 (23)	5 (4)	$\chi^2=11.64$ , p
ng MHD	74 (38)	98 (50)	23 (12)	68 (54)	45 (36)	12 (10)	$\chi^2=8.44$ , p
g Jinn affliction	102 (52)	75 (38)	18 (10)	76 (61)	36 (29)	13 (10)	$\chi^2=3.14$ , p
reating Jinn affliction	68 (35)	96 (49)	31 (16)	37 (30)	74 (59)	14 (11)	$\chi^2=3.26$ , p
RF treating Jinn affliction	63 (32)	98 (50)	34 (18)	43 (34)	55 (40)	27 (22)	$\chi^2=1.41$ , p
<b>black magic</b>	92 (47)	97 (50)	6 (3)	69 (55)	53 (42)	3 (3)	$\chi^2=1.97$ , p
ng MHD	72 (37)	99 (51)	24 (12)	59 (47)	50 (40)	16 (13)	$\chi^2=3.87$ , p
g BM affliction	71 (36)	98 (50)	26 (14)	63 (50)	46 (37)	42 (13)	$\chi^2=6.64$ , p
reating BM affliction	60 (31)	109 (56)	26 (13)	38 (30)	71 (57)	16 (13)	$\chi^2=0.031$ , p
treating BM affliction	48 (25)	115 (59)	32 (16)	33 (26)	69 (55)	23 (19)	$\chi^2=0.46$ , p
<b>EE</b>	69 (35)	119 (61)	7 (4)	72 (58)	48 (38)	5 (4)	$\chi^2=16.03$ , p
ng MHD	40 (20)	126 (65)	29 (15)	29 (23)	71 (57)	25 (20)	$\chi^2=2.19$ , p
ng EE affliction	61 (31)	103 (53)	31 (16)	64 (51)	43 (34)	18 (15)	$\chi^2=13.51$ , p
reating EE affliction	64 (33)	104 (53)	27 (14)	40 (32)	68 (54)	17 (14)	$\chi^2=0.035$ , p
treating BM affliction	48 (25)	113 (58)	34 (17)	34 (27)	64 (51)	27 (22)	$\chi^2=1.51$ , p
nt at 0.05 ood ratio ous figures ntal health difficulties r magic ye							

Table 3: Beliefs about Jinn, black magic and evil eye; comparison by level of education

	Level of education							
	Primary or below (total=89) n (%)			Secondary (total=105) n (%)			Higher	
	Yes	No	DK	Yes	No	DK	Yes	
<b>Belief in Jinn</b>	65 (73)	22 (25)	2 (2)	84 (80)	19 (18)	2 (2)	83 (66)	4
Jinn possession	67 (75)	21 (24)	1 (1)	74 (70)	29 (28)	2 (2)	55 (44)	5
Jinn causing MHD	48 (54)	25 (28)	16 (18)	56 (53)	44 (42)	5 (5)	38 (30)	7
RF treating Jinn affliction	62 (70)	17 (19)	10 (11)	64 (61)	36 (34)	5 (5)	52 (41)	5
Doctors treating Jinn affliction	23 (26)	51 (57)	15 (17)	41 (39)	54 (51)	10 (10)	41 (33)	6
Doc & RF treating Jinn affliction	32 (36)	40 (45)	17 (19)	34 (32)	55 (53)	16 (15)	40 (32)	5
<b>Belief in BM</b>	52 (59)	35 (39)	2 (2)	58 (55)	46 (44)	1 (1)	51 (40)	6
BM causing MHD	48 (54)	23 (26)	18 (20)	47 (45)	50 (47)	8 (8)	36 (29)	7
RF treating BM affliction	54 (61)	21 (23)	14 (16)	46 (44)	50 (47)	9 (9)	34 (27)	7
Doctors treating BM affliction	25 (28)	50 (56)	14 (16)	38 (36)	55 (52)	12 (12)	35 (28)	7
Doc & RF treating BM affliction	26 (29)	43 (48)	20 (23)	28 (26)	64 (61)	13 (13)	27 (21)	7
<b>Belief in EE</b>	56 (63)	30 (34)	3 (3)	49 (47)	53 (50)	3 (3)	36 (28)	8
EE causing MHD	26 (29)	34 (38)	29 (33)	28 (26)	64 (61)	13 (13)	15 (12)	9
RF treating EE affliction	54 (61)	18 (19)	17 (20)	40 (38)	55 (52)	10 (10)	31 (24)	7
Doctors treating EE affliction	30 (34)	43 (48)	16 (18)	34 (32)	60 (57)	11 (11)	40 (32)	6
Doc & RF treating EE affliction	28 (32)	36 (40)	25 (28)	25 (24)	65 (62)	15 (14)	29 (23)	7

\* significant at 0.05

LR=Likelihood ratio; RF=religious figures; MHD=mental health difficulties; BM=black magic; EE=evil eye



Table 4: Multinomial logistic regression analysis

Belief systems*	Predictor variables	B	OR (95% CI)	Sig.
Belief in Jinn possession	Female gender	0.61	1.8 (1, 3.1)	0.023**
	Lower education	0.96	2.6 (1.4, 4.9)	0.003**
Jinn causing MHD	Female gender	0.4	1.5 (0.9, 2.5)	0.115
	Lower education	1.1	3.2 (1.7, 6.2)	<0.001**
RF treating Jinn affliction	Female gender	0.11	1.1 (0.6, 1.8)	0.661
	Lower education	1.36	3.9 (1.9, 7.6)	<0.001**
BM causing MHD	Female gender	0.14	1.1 (0.6, 1.9)	0.593
	Lower education	1.48	4.3 (2.2, 8.5)	<0.001**
RF treating BM affliction	Female gender	0.24	1.2 (0.7, 2.1)	0.359
	Lower education	1.59	4.9 (2.5, 9.5)	<0.001**
Belief in EE	Female gender	0.67	1.9 (1.2, 3.2)	0.007**
	Lower education	1.27	3.5 (1.9, 6.6)	<0.001**
EE causing MHD	Female gender	-0.1	0.9 (0.4, 1.6)	0.731
	Lower education	1.62	5 (2.3, 10.9)	<0.001**
RF treating EE affliction	Female gender	0.57	1.7 (1, 3)	0.033**
	Lower education	1.78	5.9 (2.9, 11.9)	<0.001**
* the reference category is: No. ** significant at 0.05 RF=religious figures MHD=mental health difficulties BM=black magic EE=evil eye				