# *Muslim Nursing Student Beliefs about Possession States: An Exploratory Survey of Beliefs and Causal Attributions*

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ABSTRACT: This study was undertaken to explore beliefs about Jinn, black magic and evil eye among Muslim nursing students at University of Calgary in Qatar (UCQ). The aim was to determine the extent and ways in which Muslim nursing students attribute physical and mental health problems to these perceived possession states. One hundred and twenty eight undergraduate nursing students who self-identified as adherents of the Islamic faith completed a survey concerning their beliefs in Jinn, black magic and evil eye. The sample included two streams of students: Bachelor of Nursing Regular Track (BNRT, N=44) and Post Diploma Bachelor of Nursing students (PDBN, N=75) who had already completed a nursing qualification and were in the process of completing the degree program. Results of the survey showed that 84.1% of BNRT students and 73% of PDBNs believe that Jinn can possess or take over humans. The vast majority of students (BNRT 90.7%, PDBN 84%) believe in black magic while over 90% of BNRTs and PDBNs believe in the evil eye. This research adds to the limited literature available on beliefs regarding possession states among Muslim nursing students. It also provides information that can be used by faculty to better understand the prevailing beliefs and attitudes of nursing students.

*Keywords:* jinn, black magic, evil eye, nursing students, teaching and learning

RESUMÉ: On a entrepris cette étude pour en savoir un peu plus sur ce que les étudiants musulmans en soins infirmiers de l'Université de Calgary au Qatar (UCQ), croient du Djinn, de la magie noire et du mauvais œil. Il fallait en connaître l'étendue et les façons dont ces étudiants reportent les problèmes de santé physiques et/ou mentaux sur ces états de possession ressentis. Cent vingt-huit étudiants en soins infirmiers du premier cycle, et qui se considèrent adeptes de l'Islam, ont répondu au questionnaire. Le panel était composé de deux sortes d'étudiants : quarante-quatre étudiants en Baccalauréat de soins infirmiers (BNRT) et soixante-quinze étudiants d'un niveau supérieur en soins infirmiers (PDBN) qui ont déjà terminé leur formation et étaient en train de finir un autre programme. 84,1 % des étudiants (BNRT) et 73 % des étudiants (PDBN) croient que le Djinn peut posséder un individu et dominer les humains. La grande majorité des étudiants (90,7 % des BNRT) et (84% des PDBN) croient en la magie noire alors que plus de 90 % des BNRT et des PDBN croient dans le mauvais œil. Ce sondage apporte des informations supplémentaires à la

documentation un peu pauvre que nous avions jusqu'à présent sur ce que les étudiants musulmans en soins infirmiers croient de la possession. Ces informations réalisées seront aussi à la disposition du corps enseignant de la Faculté afin que ce dernier comprenne mieux les tenants et aboutissants des croyances et comportements des étudiants en soins infirmiers.

Mots-clés : Djinn, magie noire, mauvais œil, étudiants en soins infirmiers, enseignement et apprentissage.

## *Introduction*

It is common for Muslim nursing students at the University of Calgary in Qatar (UCQ) to discuss beliefs in possession states such as Jinn, black magic or evil eye as causal factors of illness. The belief in possession states may be viewed as a contradiction or in conflict with a Western nursing curriculum which focuses on scientific methods, evidence-based, research-directed approaches to critical thinking and care. Nursing students at UCQ are educated by Canadian faculty members with a focus on the provision of care that is of evidence-based best practice. However, Muslim nursing students may attribute a person's disease or health disorder to the presence of Jinn, black magic or evil eye. It is essential to be aware of the influence of these cultural beliefs as they may impact teaching, learning and patient-centred care. Patient-centred care is described as an approach to care that is inclusive of advocacy, empowerment and respect for the individual as an autonomous, participant in decisions related to health and well-being (RNAO, 2006). It is the cornerstone of Western nursing curriculum. This study was undertaken to determine to what extent Muslim nursing students at UCQ believe in and attribute physical and mental health problems to Jinn, black magic and evil eye. This article will discuss Islam and possession states, describe the findings, and potential implications for patient care and nursing education.

## *Literature Review*

### *Islam and Possession States*

Islam is the second most common religion in the world after Christianity, and the predominant religion in Qatar (Pew Research Center, 2012). Islam translates as "submission" in Arabic, specifically concerning submission to the will of God (Hodge, 2005). Through the Holy Qur'an, Muslims are provided a blueprint for daily living and worship of Allah. Guidance for everyday life, philosophical, legal and health related decisions, is provided by the words, responses, and decisions of the Prophet Mohammed (Peace Be Upon Him) in the Sunna of the Qur'an and there is no separation of the physical, emotional, and spiritual self (Lovering, 2014; Sabry &Vohra, 2013). Religion and spirituality are viewed as one in Islam. Culturally relevant nursing education must acknowledge Islamic beliefs concerning the total integration and Oneness (Tawheed) of Allah and the importance of reading verses from the Qur'an and use of prayer as healing methods (Lovering, 2014).

Jinn are described as sentient beings that were created out of a smokeless fire (Johnsdotter, Ingvarsdotter, Ostman, & Carlbom, 2011). Everyone is born with a Jinn. They are unseen creatures and supernatural (as in beyond nature and in the spirit realm) spirits that can be good or bad, helpful or harmful, but generally are believed to have a negative impact on the mind and body of the recipient. People can be possessed by Jinn and it is believed that the person will have little to no control over actions and behaviours. Jinn are reported to alter mood states; create anxiety, aggression, weeping, anhedonia, and socially embarrassing behaviour (El-Islam, 2008; Hanely & Brown, 2013; Khalifa & Hardie, 2005; Lovering, 2014). Jinn are referred to approximately 30 times in the Qur'an and Muslims around the world may believe in possession states as causal factors of physical and mental illness (Al Habeeb, 2003; Dein & Illaiee, 2013; Khalifa, Hardie, & Mullick, 2012; Mullick, Khalifa, Nahar, & Walker, 2012). Islam & Campbell (2014) carried out a thematic analysis of four English translations and one Arabic text of the Qur'an and concluded that there is no connection between spirit-possession and mental illness in the text. It is clear however, that this belief, which pre-dates Islam and is considered pagan by some, continues to be an important aspect in Islamic life.

Black magic is defined as a supernatural power that can be applied to cause harm to another person (Johnsdotter, Ingvarsdotter, Ostman, & Carlbom, 2011). Evil eye is described as a look that is powerful enough to inflict harm, suffering or bad luck on those it is cast upon. Its intent is malicious; it is borne from envy and can bring about disaster, illness, or crisis to the object of one's focus. If an envious person covets another person's possessions by staring or glaring at them, the possessions can get hurt, damaged or destroyed (Mullick et al, 2012). The Qur'an refers to black magic and evil eye although with less emphasis than Jinn.

It is common in the Islamic faith and people in the Arab world, to contact faith and traditional healers first to address any physical or mental health problems (Al Habeeb, 2003; Al-Shahri, 2002; El-Islam, 2008; Islam & Campbell, 2014; Khalifa et al, 2012; Lovering, 2014; Laher, 2014; Obeid, Abulaban, Al-Ghatani, Al-Malki, & Al-Ghamdi, 2012). In fact, it is a commonly held belief that only faith healers can effectively treat a person whose physical or mental illness is caused by a possession state. Working with the health care team, a traditional healer or Imam may act as a culture broker, advising, reassuring, and supporting the patient and family to participate in biomedical treatments such as psychopharmacology, in order to assist in treatment (Al-Krenawi & Graham, 2000; Littlewood, 2004). We have used the terms faith and traditional healers interchangeably. Both are religious leaders who rely on the power of Allah to heal the sick (Ae-Ngibise et al, 2010).

The biomedical model of care, an approach that is common among health care providers educated in Western institutions, focuses on and values objective, scientific data such as lab results, diagnostic criteria, and symptomatology. These are the tools used to diagnose and treat illness. Traditionally, it is not a holistic approach nor inclusive of the broader description of health with consideration of the determinants of health (for example, education, social support, and culture). For instance, the biomedical model explains mental

illness as a brain disease and emphasizes medications as the appropriate treatment modality (Deacon, 2013) rather than a traditional healer. Typically, there is a disregard for spirituality as it cannot be measured or tested and there is literature that systematically discredits the concept of possession states (Schimmel, 2008). In fact, the researchers posit that belief in possession states is so oppositional to secular society's core beliefs that Western medical professionals dismiss it before considering it. It is common for Muslim people to attribute illness to Jinn and other possession states and this has a significant impact in diagnosing and treating particularly of psychotic disorders (Lim, Hoek, & Blom, 2014). This difference in world views creates a cultural divide that may impact nursing education and nursing care.

*Other studies*

Khalifa, Hardie, Latif, Jamil & Walker (2011) studied the beliefs of Muslims related to Jinn, black magic and evil eye using a convenience sample of 111 adults (age 18 and over) in Leicester, England. The study was carried out in order to explore health beliefs and practices related to the religious and cultural needs of Muslims, who make up nearly 3% of the population living in the United Kingdom. It was noted that in Britain, Muslim people were some of the worst affected by health inequalities, lower socioeconomic status and poorer health. Participants completed a self-administered survey with interpretation provided for those who did not speak English. There was almost an equal representation of male and female participants with the largest age group between the ages of 18 – 30 years. 80% of the respondents believed in Jinn, while 65% believed in black magic and 70% believed in evil eye. Approximately 60% believed in Jinn possession with females more likely to believe in black magic (females 55%, males 45%) and evil eye (females 54%, males 46%). Participants identified religious figures as the most appropriate healer for those afflicted with physical and mental illnesses resulting from all possession states (Jinn 64%, black magic 63%, evil eye 58%) with physicians alone cited as less effective (Jinn 23%, black magic 18%, evil eye 19%). However, almost half of the participants believe that healing will occur if the religious figure and doctor work together (Jinn 54%, black magic 45%, evil eye 42%). The authors conclude that it is common for Muslims to believe in possession states and to believe that religious leaders are the most appropriate treatment provider. Limitations of the study included use of a convenience sample in a single location, lack of information regarding level of education, use of an un-validated questionnaire, and lack of data regarding inter-rater reliability of translations.

Mullick et al, (2012) revised the questionnaire to determine beliefs about possession states among 320 participants who were accompanying patients at a university hospital in Dhaka, Bangladesh. 72% of the respondents believed in Jinn, 61% in Jinn possession, 50% in black magic, and 44% in evil eye. Females were more likely than males to believe in Jinn, Jinn possession and evil eye, and more likely to cite religious figures as the preferred and most appropriate healer for diseases resulting from black magic and evil eye. Those with higher education were less likely to believe in Jinn possession or as causal

factors in physical and mental health illnesses. Those with lower education had stronger beliefs in religious leaders as being the most effective healers. Both studies question whether beliefs in possession states may be related to lack of education and financial resources.

This study was undertaken to determine to what extent Muslim nursing students at UCQ believe in and attribute physical and mental health problems to Jinn, black magic and evil eye. The literature unveiled a belief system that runs in opposition to the current nursing curriculum being taught to UCQ's Muslim nursing students. What exactly do the students believe? This study will begin to unpack the beliefs of our Muslim students. The results will assist in better understanding our students, inform possible changes to nursing curriculum, and suggest the questions that need asking next.

## *Methodology*

### *Procedure*

This is a quantitative study of beliefs in possession states among UCQ nursing students. This study was approved by the University of Calgary Conjoint Health Research Ethics Board REB14-0256.

All UCQ nursing instructors teaching in the undergraduate program in the Spring Semester, 2014 were invited to distribute the questionnaires to Muslim students in the class. Eight instructors who were not part of the research team introduced the study and questionnaire to students in their classes regardless of year in program (Year 1, 2, 3, or 4), providing an information sheet and gaining informed consent from those students who agreed to participate. Consent was implied by participants upon completion of the questionnaire. The questionnaire was in English, which is the instructional language at UCQ. The majority of nursing students are English-as-a-Foreign-Language learners. Clear instructions were provided verbally by the faculty member administering the questionnaire with further written instructions provided on the information sheet. The survey was administered in the classroom setting and took approximately 15 minutes to complete. Participation was entirely voluntary and students were assured that class marks would not be affected. Instructors were asked to read the information sheet exactly as provided and not engage students in discussion regarding the study, or participation or non-participation.

Anonymity and confidentiality were ensured as there was no identifying information obtained about the students or the class they were taking. It was explained that all results would be analyzed and presented as an aggregate. Students were instructed to contact a member of the research team directly if they had specific questions about participating.

The survey responses were analyzed using the Statistical Package for the Social Science (SPSS, Version 18.0). Descriptive statistics were computed to determine the frequencies and percentage of responses for each question. Bar graphs were prepared to illustrate the frequencies of responses for beliefs in Jinn, black magic and evil eye.

*Sample*

This was a convenience sample as students who self-identified as Muslim and enrolled in the BNRT or PDBN program were invited to participate. As of February, 2014, there were 247 nursing students registered at UCQ (BNRT = 108, PDBN = 139) with an estimated 80% (198) identified as Islamic and almost 30% identified as Qatari Nationals. Approximately 90% of the student population was female and 10% male. One hundred and thirty (130) surveys were returned, and two (2) surveys were discarded due to lack of completion. Therefore data from 128 surveys resulted in a response rate of approximately 65% of the Muslim nursing student population at UCQ. Most respondents were single (59%) or married (35.4%). The majority of the respondents were between 18 – 30 years old (BNRT 93%, PDBN 51%) with the next largest age group between 31 – 40 years (28%). Almost 76% of the participants spoke Arabic as a first language with 17% identifying "Other than English" as their first language.

*Instrument*

The researchers administered the survey *Beliefs about Jinn, Possession, Black Magic and Evil Eye* developed for use in previous studies regarding beliefs about possession among Muslims in Leicester, England and Dhaka, Bangladesh (Khalifa et al, 2011; Khalifa et al, 2012; Mullick et al, 2012). The survey consisted of 21 questions and was divided into 4 sections:

Section 1: Demographics – includes sex, age, marital status, enrolment status including year in program, other education, nationality, place of birth, household income, first language, and other languages spoken.

Section 2: Questions specific to Jinn

Section 3: Questions specific to black magic

Section 4: Questions specific to evil eye

One additional question was added to each section.

Section 2 - Do you think you have cared for patients whose illness was caused by Jinn?

Section 3 - Do you think you have cared for patients whose illness was caused by Black Magic?

Section 4 - Do you think you have cared for patients whose illness was caused by Evil Eye?

A forced choice format was used for all questions. This consisted of 3 options for each question:

Yes, No, Don't Know.

*Beliefs about Jinn*

84% of BNRT and 73% of PDBN students indicated that Jinn can possess or take over humans (Figure 1). 64.3% BNRTs and 44% PDBNs attribute physical illness to Jinn. The PDBN respondents most commonly cited that the physical illnesses attributed to Jinn were convulsion, epilepsy and seizure, followed by blood pressure problems, and headache. The BNRT respondents identified headache as the most common physical illness attributed to Jinn

followed by high blood pressure, epilepsy, and mental and body weakness. The majority of respondents believe that Jinn can cause mental illness (BNRT 70.5%, PDBN 70.7%). Anxiety, depression, personality problems, and schizophrenia were identified as the results of Jinn possession by PDBN students. Interestingly, three respondents also listed fear and aggression as outcomes of Jinn. Epilepsy was also noted under mental illnesses. BNRT students identified depression and personality problems as the most common mental illnesses attributed to Jinn. One respondent stated that "It makes you do harm(ful) things to yourself and (other) people". One of the BNRT students wrote "Black magic and evil eye can cause these physical illness not Jinn". In terms of treatment, it is clear that nursing students believe that religious leaders are the most effective at treating both physical or mental illness (BNRT 84.1%, PDBN 92%) whereas their belief in the effectiveness of physicians treating those affected by Jinn is low (BNRT 9.1%, PDBNs 10.7%). One PDBN clarified however, that not any Sheikh can treat or help people with Jinn – only "Good Sheikh". If doctors and religious leaders work together, then 63.6% of BNRTs and 62.7% of PDBNs believe that a patient could be treated. Almost 28% of both BNRT and PDBN students think they have cared for a patient whose illness was caused by a Jinn. (Table 1)

*Beliefs about Black Magic (Sehr, Jadu)*

Figure 2 shows that 90.7% of BNRT and 84% of PDBN students subscribed to a belief in black magic. Nursing students attributed black magic to physical illness (BNRT 72.7%, PDBN 68%). PDBN respondents identified epilepsy and headache in association with black magic while BNRTs stated blindness and the inability to get pregnant as the most common identifiers. There was more generalization of illness in relation to black magic as evidenced by the following statements: "something that cannot be cured", "depends on the magic that the person (chooses)", "depends on the reason (why) they did the black magic", "depend (on) the name of the black magic", and "women not getting married, weak in body". Respondents believe that mental illness can be attributed to black magic (BNRT 88.6%, PDBN 83.6%). Both BNRT and PDBN students noted that mental illness caused by black magic manifests as depression, seizures, convulsions, epilepsy; and schizophrenia. PDBNs also noted that anxiety, abnormal behaviours, and hallucinations were indicative of black magic while BNRTs used terms such as "psycho", "mental", and "crazy". One BNRT student wrote that black magic can cause "Anything like preventing women from being pregnant, harming other people, diseases, cancers". The majority of participants indicated that religious leaders can treat or help people affected by black magic (BNRT 77.3%, PDBN, 69.3%) but few students were of the opinion that doctors alone could help these people (BNRT 9.3%, PDBN 12.2%). There was less confidence in doctors and religious leaders working together to achieve success in treating illness (BNRT 56.8%, PDBN 48.6%). Only 20.5% of BNRT and 23% of PDBN students believe they have ever cared for a patient whose illness was caused by black magic. (Table 2)

*Beliefs about Evil Eye (Nazar, Hasad)*

Figure 3 reveals that 90.9% of BNRT and 90.5% of PDBN respondents believe in evil eye. The findings affirm that they believe that evil eye can cause physical illness (BNRT 72.1%, PDBN 78.4%) and mental illness (BNRT 59.1%, PDBN 58.9%). The most commonly noted physical illnesses were headache, fatigue, and general body aching. Like black magic, the effects of evil eye appear to be more vague as evident by the statements: "disability/accident will happen/death", "lose the thing which (the) person has such as can't walk", "any type of medical illness – that will depend (on) the evil eye itself". Several participants documented proof of evil eye through comments such as "narrated to the Prophet Mohamed (Peace Be upon Him) that he mentioned that the evil eye is true" and "It can lead to death, you can check Holy Quran for evidence". Mental illnesses noted by PDBNs in relation to evil eye were depression, anxiety, fear, and epilepsy. BNRTs identified depression and "crazy" as the main indicators of evil eye. The participants demonstrated again that they have faith in the ability of religious leaders in treating evil eye (BNRT 81.8%, PDBN 83.8%) and only a small degree of faith in doctors (BNRT 15.9%, PDBN 17.8%). Nursing students identified that doctors and religious leaders working together would have greater success in treating illness related to evil eye (BNRT 45.5%, PDBN 25%). Twenty five percent (25%) of BNRT and 37% of PDBN students believe that they have cared for a patient whose illness was caused by evil eye. (Table 3)

## *Discussion*

This study reveals that undergraduate nursing students at UCQ strongly believe in the existence of possession states, that they are causal factors of physical and mental illness, and that religious leaders are deemed the most effective healer. Jinn causes more specific, diagnosable physical and mental illnesses and conditions while participants reported that black magic and evil eye cause more generalized medical ailments and disabilities such as inability to walk, weakness, fatigue, and inability to bear children. Nursing students attributed Jinn and black magic as causal factors of mental illness at higher rates than physical illness. BNRT and PDBN students overwhelming support a religious leader as the most effective at treating those who are possessed. Contacting faith and traditional healers first to address any physical or mental health problems is common among Muslim people in the Arab world. (Al Habeeb, 2003; Al-Shahri, 2002; El-Islam, 2008; Islam & Campbell, 2014; Khalifa et al, 2012; Lovering, 2014; Laher, 2014; Obeid et al, 2012). The second preferred treatment team would be a religious leader and a doctor. The results show that a doctor would be the least effective at treating a person in a possessed state.

One would anticipate that since the belief in possession states is so high, that nursing students, particularly PDBNs who have generally worked as nurses for several years, would report that they have cared for many people whose illness was caused by Jinn, black magic or evil eye. This was not evident in our findings. We anticipated that PDBN students would have cared for many people

afflicted by possession states but these numbers were low, particularly for Jinn (28.4%) and black magic (23%). Evil eye was more common (37%). PDBN students thought that they had cared for patients affected by Jinn (28%), black magic (22%) and evil eye (31%). It seems that belief in possession states does not directly relate to perceptions of individuals' nursing experience. That is, although a student believes in Jinn they are most likely to report that they have not yet encountered this in their own practice. This could be a useful point for discussion in class about student beliefs and actual experiences and causal attributions.

Our study results regarding the belief in Jinn, black magic and evil eye as causal factors of physical and mental illness corroborate the findings of Khalifa et al (2011) and Mullick et al (2012). As in our study, the majority of the respondents believed in Jinn, black magic and evil eye and identified religious figures as the most appropriate healer for those afflicted with physical and mental illnesses resulting from all possession states. Doctors alone were reported as less effective at managing and treating these clients. The previous studies suggest that beliefs in possession states are related to lack of education and financial resources however, our findings revealed a different result. Our study participants were primarily female, had high levels of education, enjoyed a high standard of living, and yet demonstrated strong beliefs in possession states as causal factors in physical and mental illness. It is our experience that Muslim nursing students attributed illness to possession states; however, we were surprised by the high number of those who believed this. It was also surprising that while the Western world values and turns to medical physicians for treatment, Muslim nursing students strongly identified religious leaders (Iman, Alim, and Sheikh) as the most effective healer for possession states.

*Nursing Education*

Nursing students assess, plan and implement interventions, act as advocates and teachers, and provide referrals for patients and their family members who may require resources, services and support from other health and psychosocial service providers. Muslim nursing students may be inclined to base their teaching of patients and family members upon the Islamic beliefs of Jinn, black magic, and evil eye rather than evidence-based, nursing science. They may also choose to advocate and refer Muslim patients to faith and traditional healers in accordance with the Islamic teachings rather than members of the health care team (El-Islam, 2008). Faith and traditional healers may reinforce family and patient's beliefs that illness is the result of supernatural agents such as Jinn, black magic or evil eye (El-Islam, 2008). This may result in discord among the health care team, religious healers, patient and family which may impact care and recovery. These findings highlight the need to have open discourse regarding the role of possession states and illness. Muslim nursing students can serve as informants and mentors for non-Muslim faculty, peers, and nurses related to the role of Islam in health care (Dein, 1997). Nursing faculty could address the need to include the religious leader as part of the health care team which would empower students to advocate for referrals (Abdul-Khalek, 2011; Ae-Ngibise et al, 2010; Dein & Illaiee, 2013; Hill & Pargament, 2008;

Puchalski, 2001; Verhagen, 2011). In light of our findings, it is clear that nursing students practicing in mental health need to receive specialized training regarding incorporation and consideration of cultural norms and beliefs (Al-Krenawi & Graham, 2000; Al-Sharbati, Hallas, Al-Zadjali, & Al-Sharbati, 2012; Weatherhead & Daiches, 2010).

In Western culture and nursing education, value is placed in science rather than traditional healers and alternative healing modalities. It is important for nursing faculty to understand the deeply ingrained beliefs in possession states and the subsequent need for traditional healers (Al-Solaim & Loewenthal, 2011). Nursing education in Qatar must be culturally inclusive and sensitive to issues with consideration and understanding of Islamic culture and views. Culturally relevant nursing education must acknowledge Islamic beliefs concerning the total integration and Oneness (Tawheed) of Allah, the importance of reading verses from the Qur'an and use of prayer as healing methods (Lovering, 2014).

Culture determines what an individual perceives as normal within categories, rules, plans, and contexts we learned in childhood (Dein, 1997). Cultural competence, described as a set of skills or the ability to establish and maintain interpersonal and professional relationships in order to function effectively, regardless of differences in culture, is a term commonly used in health care and nursing education (Anderson et al, 2003; Beach et al, 2005; Lipson & Desantis, 2007). Instructors who are culturally competent show an appreciation, acceptance and value for cultural differences and diversity rather than the need to evaluate or confront that which is deemed outside cultural norms (Bhui, Warfa, Edonya, McKenzie, & Bhugra, 2007). In nursing and in health care, cultural considerations are important to the nurse-patient relationship, development and implementation of a treatment plan, and recovery. Consideration of possession states, integral to Islam, need to be incorporated into nursing education. (Al Mutair, Plummer, O'Brien, & Clerehan, 2014; El-Amouri & O'Neill, 2011).

*Issues and Limitations*

The questionnaire was an un-validated tool developed for use in England and Bangladesh. The findings are limited to UCQ undergraduate nursing students. No comparison was made between female and male participants. The philosophy and teachings of the nursing program at UCQ value and purport science rather than faith-based treatment and solutions to health care issues. Students may have been concerned that a belief in Jinn, black magic and evil eye would not be in accordance with the predominating evidence-based approach to health care therefore may not have revealed their true thoughts and beliefs. Conversely, nursing students that believe in Islam as the foundational structure of their lives and culture may not have felt free to answer the questions in any way that might have run in opposition to the religious beliefs.

*Implications*

*Potential Benefits*

The primary benefit of this study is the confirmation, improved awareness and enhanced understanding of the beliefs of UCQ nursing students regarding Jinn, black magic and evil eye. It also reveals the confidence in and preference for healing by religious leaders and faith healers rather than physicians which is incongruent with the current Western nursing education model. Other benefits include raising awareness of faculty members regarding the need to incorporate or enhance culturally inclusive content into the nursing curriculum. The increased awareness of faith-based cultural norms may lead to richer and more meaningful discussions and sharing of information that will enhance mutual learning and ultimately lead to improved patient care. This research will enhance and add to the limited literature available on nursing education for Muslim students in the Middle East. This study has raised awareness of the need to further study cultural differences and implications for health care and education in Qatar and likely other Islamic nations. (Dein & Bhui, 2013; Jaalouk, Okasha, Salamoun, & Karam, 2012; Osman & Afifi, 2010).

*Potential Future Research*

There are several areas that require further study. The questionnaire does not address patient care. Although we have made inferences regarding potential impact on nursing care, no conclusions can be made regarding this important issue. This study examined nursing student beliefs only. Future research could expand to include other health care providers, patients, family members, and religious leaders. Further exploration of this topic using a qualitative approach may allow clarification of data and deepen the researchers' understanding. There is a paucity of literature concerning the effectiveness of current or past models of nursing care in Muslim countries which is designed to preserve the special customs of Islamic law (Al Mutair et al, 2014). This would be another interesting area for research. The researchers did not address education strategies regarding religion, possession states, and impact on nursing.

## *Conclusion*

While we knew there was a strong inclination toward the belief in possession states, we were not anticipating these overwhelming results. The impact of religious beliefs on causation and preferred health care provider were not fully understood either. It is interesting to note that there is little difference in the belief in each of the entities, though nursing students' comments suggest each entity is responsible for slightly different health issues. Beliefs related to Islam and the impact on health and health care are not formally included in the current nursing curriculum. As we value cultural competence in provision of patient care in our health care systems, so do we need to focus on cultural competence in nursing education (Bhui et al, 2007). This study illuminates nursing students' beliefs in possession states as causal factors of physical and mental illness and the importance of role of the religious leader. Faculty

members need to incorporate discussion regarding possession states as it may impact assessment, nursing interventions and treatment approaches. The nursing student can also advocate for inclusion of a traditional healer on the health care team caring when caring for Muslim clients to ensure culturally competent care.

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## Tables

Figure 1: Do you believe that Jinn can possess or take over humans?

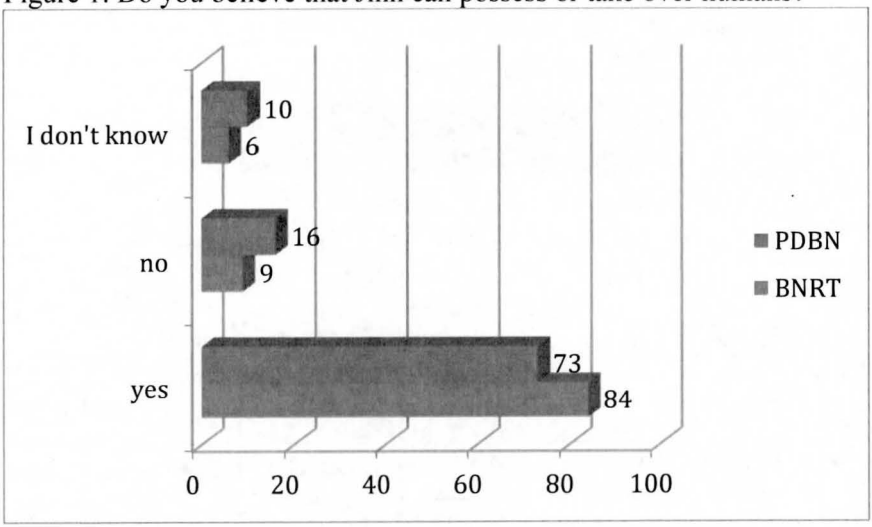


Figure 2: Do you believe in Black Magic (Sehr, Jadu)?

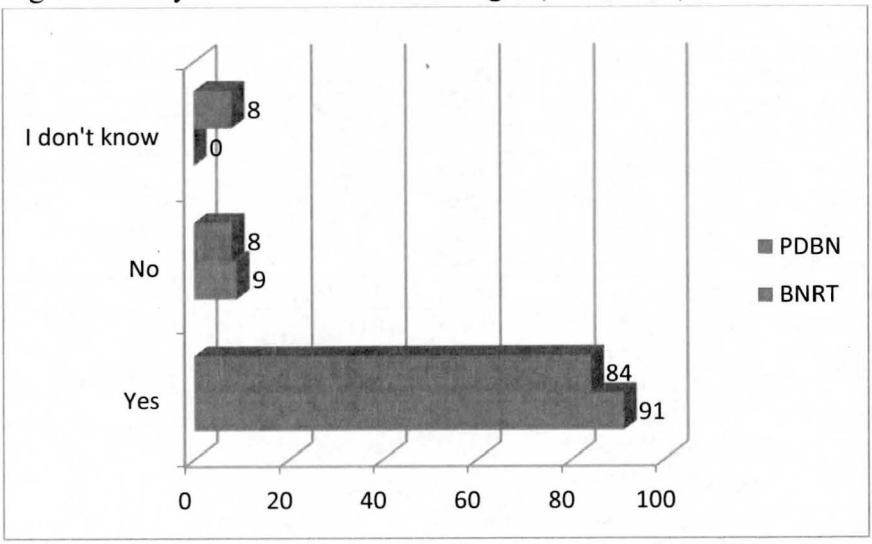

Figure 3: Do you believe in Evil Eye (Nazar, Hasad)?

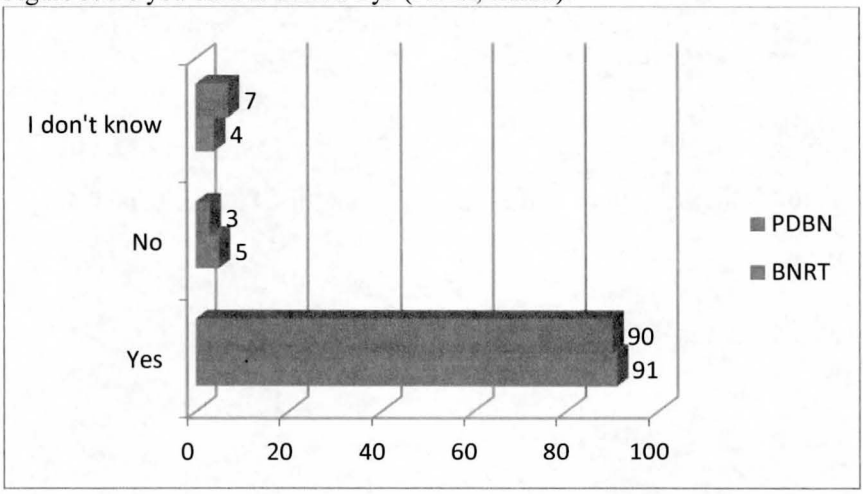


Table 1: Beliefs about Jinn – Frequencies and Cross tabulations

| **Questions** | **Status** | **Yes** | **No** | **Don't Know** |
|---|---|---|---|---|
| Q1 - Do you believe that Jinn can possess or takeover humans? | BNRT | 37 (84.1%) | 4 (9.1%) | 3 (6.8%) |
| | PDBN | 54 (73%) | 12 (16.2%) | 8 (10.8%) |
| Q2 - Do you believe that Jinn can cause physical illness in humans? | BNRT | 27 (64.3%) | 10 (23.8%) | 5 (11.9%) |
| | PDBN | 33 (44.0%) | 32 (42.7%) | 10 (13.3%) |
| Q3 - Do you believe that Jinn can cause mental illness in humans? | BNRT | 31 (70.5%) | 9 (20.5%) | 4 (9.1%) |
| | PDBN | 53 (70.7%) | 17 (22.7%) | 5 (6.7%) |
| Q 4 - Do you think that religious leaders could treat or help people affected by Jinn? | BNRT | 37 (84.1%) | 3 (6.8%) | 4 (9.1%) |
| | PDBN | 69 (92.0%) | 1 (1.3%) | 5 (6.7%) |
| Q5 - Do you think that doctors could treat or help people affected by Jinn? | BNRT | 4 (9.1%) | 29 (65.9) | 11 25.0%) |
| | PDBN | 8 (10.7%) | 53 70.7%) | 14 (18.7%) |
| Q6 - Do you think that both doctors & religious leaders working together could treat or help people affected by Jinn? | BNRT | 28 (63.6%) | 10 (22.7%) | 6 (13.6%) |
| | PDBN | 47 (62.7% | 11 (14.7%) | 17 (22.7%) |
| Q7 - Do you think you have cared for patients whose illness was caused by Jinn? | BNRT | 12 (27.9%) | 19 (44.2%) | 11 (25.6%) |
| | PDBN | 21 (28.4%) | 37 (50.0%) | 16 (21.6%) |

Table 2: Beliefs about Black Magic – Frequencies and Cross tabulations

| Questions | Status | Yes | No | Don't Know |
|---|---|---|---|---|
| Q8 - Do you believe in Black Magic (Sehr, Jadu)? | BNRT | 39 (90.7%) | 4 (9.3%) | 0 (0.0%) |
| | PDBN | 63 (84.0%) | 6 (8.0%) | 6 (8.0%) |
| Q9 - Do you believe that Black Magic can cause physical illness in humans? | BNRT | 32 (72.7%) | 6 (13.6%) | 6 (13.6%) |
| | PDBN | 51 (68.0%) | 13 (17.3%) | 11 (14.7%) |
| Q10- Do you believe that Black Magic can cause mental illness in humans? | BNRT | 39 (88.6%) | 2 (4.5%) | 3 (6.6%) |
| | PDBN | 61 (83.6%) | 5 (6.8%) | 7 (9.6%) |
| Q11 - Do you think that religious leaders could treat or help people affected by Black Magic? | BNRT | 34 (77.3%) | 7 (15.9%) | 3 (6.8%) |
| | PDBN | 52 (69.3%) | 14 (18.7%) | 9 (6.8%) |
| Q12- Do you think that doctors could treat or help people affected by Black Magic? | BNRT | 4 (9.3%) | 27 (62.8%) | 12 (27.9%) |
| | PDBN | 9 (12.2%) | 51 (68.9%) | 14 (18.9%) |
| Q13- Do you think that both doctors & religious leaders working together could treat or help people affected by Black Magic? | BNRT | 25 (56.8%) | 8 (18.2%) | 11 (25.0%) |
| | PDBN | 36 (48.6%) | 16 (21.6%) | 22 (29.7%) |
| Q14- Do you think you have cared for patients whose illness was caused by Black Magic? | BNRT | 9 (20.5%) | 17 (38.6%) | 17 (38.6%) |
| | PDBN | 17 (23.0%) | 35 (47.3%) | 22 (29.7%) |

Table 3: Beliefs about Evil Eye – Frequencies and Cross tabulations

| Questions | Status | Yes | No | Don't Know |
|---|---|---|---|---|
| Q15- Do you believe in Evil Eye (Nazar, Hasad)? | BNRT | 40 (90.9%) | 2 (4.5%) | 2 (4.5%) |
| | PDBN | 67 (90.5%) | 2 (2.7%) | 5 (6.8%) |
| Q16- Do you believe that Evil Eye can cause physical illness in humans? | BNRT | 31 (72.1%) | 4 (9.3%) | 8 (18.6%) |
| | PDBN | 58 (78.4%) | 7 (9.5%) | 9 (12.2%) |
| Q17- Do you believe that Evil Eye can cause mental illness in humans? | BNRT | 26 (59.1%) | 10 (22.7%) | 8 (18.2%) |
| | PDBN | 43 (58.9%) | 18 (24.7%) | 12 (16.4%) |
| Q18- Do you think that religious leaders could treat or help people affected by Evil Eye? | BNRT | 36 (81.8%) | 4 (9.1%) | 4 (9.1%) |
| | PDBN | 62 (83.8%) | 3 (4.1%) | 9 (12.2%) |
| Q19- Do you think that doctors could treat or help people affected by Evil Eye? | BNRT | 7 (15.9%) | 20 (45.5%) | 17 (38.6%) |
| | PDBN | 13 (17.8%) | 43 (58.9%) | 17 (23.3%) |
| Q20- Do you think that both doctors & religious leaders working together could treat or help people affected by Evil Eye? | BNRT | 20 (45.5%) | 11 (25.0%) | 13 (29.5%) |
| | PDBN | 34 (45.9%) | 18 24.3%) | 22 (29.7%) |
| Q21- Do you think you have cared for patients whose illness was caused by Evil Eye? | BNRT | 11 (25.0%) | 17 (38.6%) | 15 (34.1%) |
| | PDBN | 27 (37.0%) | 27 (37.6%) | 19 (26.0%) |

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