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Health Beliefs of Muslim Women and Implications for Health Care Providers: Exploratory Study on the Health Beliefs of Muslim Women

Lori Maria Walton PhD, DPT
Andrews University, waltonl@andrews.edu

Fatima Akram, RDMS, BS
njakram@hotmail.com

Ferdosi Hossain, BBA
dalpuree@hotmail.com

Introduction

The purpose of the study is to determine specific health beliefs important to Muslim women as they relate to participation in medical, psychological or social evaluation and treatment and to determine whether any of their beliefs, attitudes, or perceptions have an effect on the female Muslim patient's decision to access and follow through with medical evaluation and treatment.

Muslim women have special beliefs, attitudes, and perceptions that may directly impact healthcare received within a westernized health care system that may not share the unique sensitivities of the Islamic culture (Bennoune, 2007). Health care providers are able to better advocate for their patients when they have an awareness of the unique cultural beliefs and background of their patients and how to provide a safe and comfortable place for patients to openly participate in health care decision making (Wandler, 2012). Our nation is progressively becoming more culturally diverse and recognition of the need for diversity in healthcare providers has been reported (Noah, 2008). The population of Muslims living in North America is estimated to be between six and seven million (Nimer, 2002). It is important to explore the beliefs of practicing Muslim women in order to fully meet the health care needs of this community (Belut and Ebaugh, 2013).

Although Muslims of all nations hold common religious beliefs, there are nine broad ethnic categories of Muslims living in North America: South Asian (25%), Arab (23%), African American (14%), sub-Saharan African (10%), Iranian (10%), Turk (6%), other Asian (5%), Balkan (2%), and other ethnicity (5%) (Nimer, 2002). Other studies indicate the percentage of Muslim immigrants to the United States alone to be from South Asia (25%), Arab (12%), and convert Muslims, primarily African American (50%) (Blank, 1995). The increase in the overall minority populations is projected to be at least 47% of the total US population by the year 2050 (Shaya and Gbararyor, 2006). This projected increase along with the current health care disparities noted in the minority communities suggest the need for research regarding the health care services for individual subculture living within the United States to meet the needs of individual ethnic and religious communities (Shaya and Gbararyor, 2006). In order to serve the needs of patients from diverse cultural backgrounds, it is imperative that physical therapy education and practice enter a stage of cultural competence, described by Cross, Bazron, Dennis, and Isaacs (1989) as "cultural proficiency, where health care providers recognize the need to conduct research, disseminate the results, and develop new approaches that might increase culturally competent practice".

Cultural competence is defined as a "set of behaviors, attitudes, and policies that come together in a continuum to enable a health care system,

agency, or individual practitioner to function effectively in trans-cultural interactions…cultural practice acknowledges and incorporates, at all levels, the importance of culture, the assessment of cross-cultural relations, the need to be aware of the dynamics resulting from cultural differences, the expansion of cultural knowledge, and the adaptation of services to meet culturally unique needs (Leavitt, 2002). Minority groups, although interested in integration of the dominant culture, also possess the desire to maintain their ingroup identity in plural societies (Horenczyk and Munayer, 2007). According to one research review, there are five components to cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Campinha-Bacote, 1999).

Cultural Competence and Health Beliefs

Health Beliefs, which define the unique perspective of individuals within a culture, are an important part of understanding cultural competence for the health care provider. Health beliefs influence the perception of health care and the health care provider, as well as the decision to access and follow through with health care treatment, including medical evaluation and treatment (Jackson, 2007). Cultural knowledge of health beliefs particular to an ethnic or religious group are the foundation for all of the other components proposed by (Campinha-Bacote, 1999). Cultural awareness, cultural skill, encounters, and

desire can only be formulated once the basic knowledge is in place. Health beliefs are an important piece of the cultural knowledge that should be studied in respect to any culture in relationship to health care provider evaluation and treatment.

Cultural competence is a primary concern among all health care providers, with the mandate from JCAHO (Joint Commission on Accreditation of Health Care Organizations) and Medicare to provide "culturally competent care" (Betancourt, Green, Carillo , and Park, 2005). Another study involving cultural competence of nurse practitioner students suggests that measurement of cultural knowledge does not guarantee cultural sensitivity, but is rather a baseline for a continuum of culturally competent skills (Campbell-Heider, Rejman, and Austin-Ketch, 2006). When studying cultural competence in relationship to medical practice, the specific health beliefs of a culture studied need to be determined. One study, by Evans, rated the student's cultural competence before and after the student performed a cross culture simulation interview of a mock patient.

Critical content included in the interview for this study included a question relating to health beliefs, "How does the patient describe the influence of his or her culture on health beliefs and practices?" (Evans, 2006) This question proposes a foundational element for researchers to build upon for further research questions. Therefore, there is a need for research to study the

health beliefs of Muslim women to provide a clinical picture that incorporates the perceived influences of culture on health beliefs and practice in the medical or rehabilitation setting.

Guiding questions

1. What are the specific beliefs of Muslim women that may affect health care, specifically health care provider evaluation and treatment?
2. What actions by the health care provider or the environment of the clinic would the Muslim woman consider offensive and prevent her from accessing medical evaluation and treatment?
3. What environment does the Muslim woman believe to be the most conducive to healing? Are there any behaviors (high risk) that may be harmful to a Muslim female that are generally practiced by Muslim women?
4. Are there specific practices in the Islamic religion regarding healing and what effect, if any, does this have on the Muslim females decision to access and follow through with medical evaluation and treatment?
5. Are there any specific beliefs regarding the use of physical touch or gender preference that would be unacceptable for therapeutic purposes for the Muslim female?

Relevance and Significance

An explosion in non-dominant cultures in the USA has turned the health care attention to promoting "culturally competent care" as a mandatory expectation from all health care providers. By the year 2050, the current "white/Caucasian" dominant culture will no longer be the majority (Shaya et al, 2006). Participatory research, when performed by the White/Caucasian dominant culture researcher in relationship to the non- dominant cultures have been determined to be viewed as "racist" by some patients and investigators, which may place barriers in the research process (Cortis and Varcoe, 2000, 2005). Therefore, it is important that research and practice, at the minimum, include researchers and/or health care providers of the same ethnic and/or cultural background.

Along with an ethnically rich population, people of other cultures also bring with them varying religious beliefs which may differ from the current dominant culture expectations, understanding, and general awareness. Among the religious cultures blossoming within the United States is the religion of Islam. By the year 2030, Islam will be the second most practiced religion within the United States of America, doubling population in just over 20 years time, second only to Christianity (Pew Research Foundation, 2011).

Although clinical education and cultural diversity in health care have been studied in specific groups of minority healthcare students and other

studies have been completed on the general health beliefs of Muslim patients, there are few studies in medical, nursing, or allied health related to the health beliefs of the female Muslim patient living in the United States of America (USA) (Clouten, 2006). Within the Muslim religion, unique health care beliefs that may impact physical, social, and psychological health need to be integrated into a cultural framework within the western dominant culture of health care provisions. The relationship of health beliefs to specific constructs is important in determining the outcome regarding access to health care, assimilation of health care practices, and follow through with medical evaluation and treatment. Included in these constructs for health beliefs of Muslim women are the following: (1) shame and honor principles, (2) modesty, (3) gender roles, (4) use of physical touch, (5) gender preferences of health care providers, and (6) spiritual beliefs that may influence the Muslim women's health care decisions (Al-Sharhri, 2002; Kulwicki, 2000; Ypinazar and Margolis, 2006; Kridli, 2011).

Since the attack on the World Trade Center on September 11, 2001, there has been a tendency of the dominant culture in the USA to portray the Muslim culture under a lens of scrutiny, profiling Muslims in the public realm, with a point of view that seeks to judge cultural differences rather than understand (Harcourt, 2006; Wing, 2005). Muslims in America, have seen a backlash against the general culture from blatant prejudice being exhibited by

hate crimes to the more subtle societal isolation that has been experienced by some Muslim communities (Hodge, 2005; Powell, 2005). Lack of understanding about the role of spirituality, role of women, and general cultural beliefs has left even the most well intentioned health care provider with a confused understanding of the role and needs of the Muslim patient living in America.

Traditionally, the health beliefs of Muslim women have been proposed by professional religious affiliated groups such as the Council for American Islamic Relations (CAIR, 2007) and the Islamic Medical Association of North America (IMANA, 2007) as guidelines for health care provider treatment of Muslim patients. (CAIR, 2007) Guidelines involving modesty issues, shame and honor, gender preference of health care provider, and spirituality practices have been described for Muslim patients; however, the information on health care beliefs of Muslim females is proposed, primarily, by a male author (Al-Sharhri, 2002; Yosef, 2013). The current guidelines proposed, mostly by male counterparts, have not been thoroughly investigated with scientific data to determine if, indeed, the female individuals in the Islamic community identify

with the same health care beliefs proposed for them. One study, which provided descriptive research analysis on a group of Pakistani men and women, provided valuable insight into Islamic values and health care perceptions from Pakistani patients living in the United Kingdom. Respect of the individual's dignity and privacy, community roles and importance, genuineness of provider, gender preference of the health care provider, modesty issues for men and women, language barriers, therapeutic touch, and the use of prayer and visitation of the sick for healing purposes were indicated as important from the Pakistani male and female viewpoint (Cortis, 2000). Although one study indicated a general belief by Arab Muslim Americans that the American health care services were superb, there was also a general confusion and difficulty in accessing the appropriate services that provided female providers for female Muslim patients and male providers for male Muslim patients. Patients also voiced dissatisfaction with the lack of language services, modesty issues for male and female patients, lack of sensitivity to extended family support and health care, lack of provision for prayer services, gender roles and sense of "community", and dietary conflict (Kulwicki & Miller, 2000). In one study of Pakistani Muslim patients with NIDDM (non-insulin dependent diabetes mellitus) living in Oslo, Norway, the participants related concerns and disappointment over the health care workers lack of effective listening skills, clarity in treatment

explanation, lack of interpreter services, and lack of interest in the personal "story" of the client, were deterrents to the patient's decision to participate fully in the health care decision making process as it related to diabetic care (Fagerli, Lien, and Wandel, 2007). A more positive experience was listed by one Pakistani Male receiving care in the American health care system, who served as an educational case study for the nursing staff responsible for his care. The patient's recommended cultural guidance included information regarding health beliefs pertaining to "ablution" or cleanliness before prayers, opposite gender use of physical touch was not encouraged prior to prayer, dietary practices, and inclusive role of the oldest son as the decision maker for the health care of his father. In this same study, which did not include female subjects in the research design provided broad generalizations about the treatment of Mulsim patients, male or female, on the basis of one Pakistani male patient. Although the study was in good faith, it does not provide a justifiable basis of treatment for the female Muslim patient. Generalized statements derived from male perspectives, such as "in emergency situations, it is best to involve male family members because making the decision alone can place a woman in an awkward situation"…"In most families, the man will be the decision maker, and the woman will be the primary caregiver" are not helpful when defining the specific health beliefs of Muslim women (Lawrence and Rozmus, 2001). The danger in this statement applies to the Muslim female patient's privacy and right to make

autonomous decisions about her own health care. It is assumed, from the case study presented, that Muslim women do not make autonomous health care decisions. However, the study fails to include a Muslim female perspective with the exclusion of female subjects. Another study (Grewal, Bottorf, and Hilton, 2005), which included Muslim females from South Asian descent living in Canada did, however, suggest a powerful connection and respect for family members advice concerning health decisions, but also suggested autonomous and private health care decision making to be a priority among Muslim women.

Practical Applications of the Findings

Assumptions of health care providers regarding the cultural needs of various religious and ethnic croups are harmful to the patient in some instances and provide a general foundation for neglect, poor clinical decision making and lack of cultural understanding necessary to provide competent care. Research directed toward Muslim females, rather than males, is necessary to verify specific health beliefs important to the empowerment of female Muslim patient when seeking medical evaluation and treatment (Pruitt, 2012). Primary research evidence is lacking regarding the expression of preferred health beliefs from Muslim women's own voices regarding health beliefs. It is imperative that the health beliefs of Muslim women be explored to dispel various myths, expose those health beliefs that are perceived as essential to the identity and perceived health of the Muslim

woman, and attempt to understand and integrate accommodation for the unique health beliefs of female Muslims living in the USA in relationship to health care provider evaluation and treatment (Parkinson, 2011).

Purnell's Model for Cultural Competence is a theoretical model that provides a framework for measuring cultural competence in any culture. This model proposes twelve different domains of culture that need to be considered when studying a specific cultural belief system. The twelve domains include: concepts related to country of origin, communication and language, family roles and organization, workforce issues, biocultural ecology, high risk behaviors, nutrition, pregnancy and childbearing practices, death rituals, spirituality practices, health care practices, and health care practitioner concepts including gender preferences (Purnell, 2005). Another popular health beliefs model is Leininger's Theory of Cultural Care and is widely used in the health care research. It includes "religious and philosophical factors" as one of the constructs that affect the culture and proposes a general guideline of what should be studied in reference to health beliefs and cultural knowledge (Leininger, 1995). For purposes of this study, Purnell's model will be used to determine specific health beliefs within the domains that are related to medical practice: concepts related to country of origin, communication and language, family roles and organization, workforce issues, high risk behaviors, nutrition,

pregnancy and childbearing practices, health care practices, spirituality, and health care practitioner concepts. Purnell's model encompasses an inclusive criteria for the cultural domains pertinent to Muslim women and therefore is appropriate for the analysis of specific health beliefs of Muslim women, including beliefs on physical touch, gender roles, spirituality practices, modesty issues, shame and honor issues, dietary practices, high risk behaviors, family/community role, and decision making (Purnell, 2005).

Medical Ethics in Islam

As a basis for studying health beliefs of Muslim women, a general understanding of the Islamic belief system as it pertains to medical ethics is indicated. Muslims derive health guidance by three major sources: (1) Quran (Muslim holy book), which outlines the five pillars of faith: shahada (Islamic statement of belief in One God), prayers (five obligatory prayers), zakat (charity), sawm (fasting during Ramadan), and the pilgrimage to Mecca (Hajj) (Hodge, 2005) (2) Sunnah (example of the Prophet Muhammad), and (3) Ijtihad (law of deductive logic) (Gatrad, 2001). The Hadiths, or sayings of the Prophet Muhammad (SAW), are also considered as accessory knowledge that may provide guidance to general health care beliefs and medical ethics. A study on the specific cultural needs of Midwestern American Arab subculture suggests fundamental health beliefs essential to culturally competent care to include support, nurturance, physical presence of male or female, modesty

issues, and behaviors that bring honor or shame (Kulwicki, 2000).

This study is congruent with the concerns proposed by the Council of Islamic American Relations as well as Purnell's twelve domains of cultural competence. Another study of Jordanian women's coping methods during labor showed that twenty-two percent of the women interviewed regarding coping strategies, gave credit to spiritual health beliefs such as concept of endurance of pain as a test of faith, as well as prayer, recitation of Quran, and faith (Abushaikha, 2007).

Certain health beliefs that target "risky behaviors" have been identified within the Muslim culture as part of the religious belief system. Behaviors such as drinking alcohol, overeating, and intake of harmful drugs are prohibited by the religion of Islam. However, other behaviors, with more subtle influences such as tobacco use, sedentary lifestyle, and stress have negative consequences on Muslim patients and are not explicitly forbidden under the sharia (law) in Islam. A study by Tartaro, Luecken, and Gunn (2005) suggests a positive relationship between health beliefs such as prayer, religiosity, concept of forgiveness and lower levels of cortisol in men and women. Accordingly, some studies have exposed the problems found within some Muslim communities from perceptions or health beliefs regarding the use of tobacco (Sondos and Johnson, 2005), lack of exercise and acceptance of fad diet alternatives (Musaiger and Shahbeek, 2001), and the increase in stress associated with

home and family responsibilities and nonwage working status for Jordanian Muslim women. (Hattar-Pollara and Dawani, 2006).

Importance of Gender Selection of Health Care Provider

Other issues of concern include gender preference of the health care provider, with studies suggesting female Muslim patients preferring female health care providers, and male Muslim patients preferring male health care providers. Although acceptance under certain limiting situations for a health care provider of the opposite sex to treat a patient have been tolerated (Boggatz and Dassen, 2006), the overall acceptance of opposite gender provider has been traditionally disliked at the minimum and refused at the extreme measure (Van Den Brink, 2003).

The new model of health from the World Health Organization (WHO) is focused on not only the absence of disease, but also the pursuit of health from a preventative perspective. (Sandstrom, 2002) However, in studies conducted with Muslim patients living in the Arabian Gulf, the perception of health involved an absence of "visible disease", with a toleration and non-attentive attitude toward prevention of "silent disease processes" such as diabetes, hypertension, and hyperlipidemia. Most preventative measures reported in this study indicated use of Quran as a guide to health beliefs and protection against disease and use of health care providers as a mechanism for receiving healing from Allah (God) (Ypinazar et al, 2006).

Other themes relevant to female Muslim health beliefs include a culture that involves caring of other family members and a sense of community, honor and respect for family members, and feminism as viewed in the context of Quranic value system (Miller and Petro-Nustas, 2002; Nahas and Amasheh, 1999). In regards to "Islamic feminism", the definition relates to Islamic women returning to traditional Islamic dress, including wearing the "hijab" (head covering) and in some cases the "niqab" (veil) and finding a sense of empowerment through the return to Quranic teachings that provide certain "rights" for Muslim women, including decisions about health care (Miller and Petro-Nustas, 2002). So, while the western health care provider may interpret the return to traditional dress and Islamic values as an "oppression", for Muslim women it may be interpreted as a "liberating experience" and provides them with "empowerment" regarding the ability to make autonomous health care decisions (Miller and Petro-Nustas, 2002).

Methods

This was a prospective, cross-sectional study of 14 Muslim women who voluntarily completed a survey instrument representative of the belief constructs essential to the Muslim faith. The survey instrument was sent to four experts who had an insider view to the religious beliefs and represented religious, academic, patient and healthcare provider perspectives. Each expert provided initial comments and returned the survey twice until each construct was agreed for adequate representation. The

surveys were then distributed and completed by the 14 Muslim women who volunteered to take part in this study. The purposive sample initially included a recruitment of twenty female Muslim subjects in three different cluster groups after approval was received from the Internal Research Board (IRB) at Washburn University. The research assistant, who was a Muslim female, distributed the surveys to Muslim female delegates of each Mosque after consent to participation by each research subject had been signed and assurance of anonymity was given. Participants were located in Wichita, Kansas, Chicago, Illinois, and New York, NY. According to research, the largest populations of Muslims living in the United States are from New York City, Los Angeles, Chicago, Houston, Boston, and Detroit-Toledo area (Denny, 1995; Haddad & Smith, 1995; Smith, 1999, Stone, 1991; Pew Research, 2011). The survey was chosen to protect participants from barriers that may be encountered by the interview process because of a fear of prejudice, racism, and possible hate crime backlash (Hodge D, 2005; Varcoe, 2006).

Accordingly, a private, autonomous research situation was provided to secure an environment where Muslim female participants would be less likely to be afraid to voice their opinions. According to one study that included the use of focus groups specific to the Arab Muslim female population living in United Arab Emirates, focus groups appropriate to Islamic culture must include a facilitator of same gender, fluent language translator available, a

comfortable location that is private, nonthreatening, readily accessible, and with a form of socializing available (Winslow, Honein, and Elzubeir, 2002). Although considering a location that is both private and nonthreatening with provision of an interpreter could prove to be difficult to provide, the use of a female research assistant who was fluent in English and Urdu and another female who was fluent in Arabic was provided for participants. The all female section of the Mosque was chosen as a private, readily accessible, and nonthreatening environment for distribution and completion of the survey. Subjects completed a self-report survey that covered six of Purnell's domains that pertain to medical evaluation and treatment: (1) Spiritual Rituals (2) Health Care Practitioner Concepts (3) Health Care Practices & Spirituality (4) Family Roles/Organization (5)Modesty Issues (6) High Risk Behaviors.

Resources and Design

Questions on the survey were based upon Purnell's twelve domains of cultural competence and identified the six domains important to medical evaluation and treatment. Narratives of health beliefs and attitudes specific to modesty, spirituality practices, physical presence of male or female health care provider, family roles and support, health care decision-making, and the use of physical touch during medical treatment were explored. Converts to Islam were excluded from the study in order to decrease the possibility of underlying cultural belief bias from the dominant culture.

Results

The initial survey was found to have strong face and content validity when examined by four expert reviewers, as well as high internal consistency among the constructs (Cronbach's Alpha= .94). Seventy percent (n=14) of the 20 surveys distributed were completed and returned by those recruited to participate in the study. Characteristics of respondents are summarized in Table 1. The typical participant was a female Muslim, from Southeast Asia, married, between the ages of 20-45 years of age, fluent in English and Urdu, with annual household income between $40,000-$80,000/year. Results in each of the six domains have been compiled and listed in Tables 2-7.

Discussion

The responses to the survey questions suggest that Muslim women have specific health beliefs that need to be considered by the health care provider during evaluation and treatment. Within domain #1 *spiritual rituals,* Muslim women have a strong belief in required prayers, fasting, charity, and zum zum water (holy water from Mecca) as possessing healing properties for physical health and should be considered by the health care provider. Providing a place for obligatory prayers, providing exercise schedules to accommodate fasting, and general sensitivity to spiritual practices should be considered important to the Muslim female patient.

According to the data collected in this study, Muslim females are willing

to access health care providers, but only if the services are provided by a female health care provider. All participants were comfortable with the use of therapeutic touch as part of treatment as long as the health care provider was female. None of the participants preferred a male health care provider and none were comfortable with physical touch during the medical evaluation and/or treatment if the health care provider was male. This is important because some health providers, such as nursing and allied health, utilize physical touch with patients for diagnosis and treatment purposes. If Muslim females prefer to have a female health care provider and do not feel comfortable with a male health care provider, their access to quality health care that is effective may be diminished due to perceived barriers from the patient perspective. On the other hand, if one is sensitive to the special needs of the Muslim female patient and a female health care provider is chosen, the patient will be more comfortable, be more likely to access further medical treatments, and may yield better treatment outcomes.

The sensitivity of the health care provider to the basic religious beliefs of the patient was also rated as very important and necessary by 93% of the participants. This may suggest a need for further study on issues of cultural sensitivity by the health care provider in a clinical setting.

Domain #3 *Health Care Practices & Spirituality* provides insight into the Muslim female perception about suffering and healing. Although a belief that "suffering is good for healing" in the Islamic faith has been suggested, 71.4% of respondents rated strongly disagree or neutral for this category. More research is needed to explore pain perception in the Islamic culture; however, the data suggests that a general perception that pain and/or suffering is tolerated because of spiritual beliefs may not be accurate.

Domain #4 *Family Roles and Organization* addresses activities of daily living issues important to health care provider evaluation and treatment. According to the survey and contrary to some models for treating a Muslim patient (Lawrence and Rozmus, 2001), 65.3% of all Muslim women surveyed do not believe household duties to be their primary responsibility and, furthermore, 92.8% agree or strongly agree that it is the husband's responsibility to assist with household duties. However, it should be taken into consideration that the survey requested a general description for household duties and did not provide for detailed description of specific household duties.

With regards to autonomy in health care decision making, the findings of this study did not agree with some literature, that suggests Muslim females would rather a male family member make health care decisions pertaining to her health care. Instead, this study suggests that Muslim women strongly believe

in making autonomous health care decisions without the assistance from a male family member and value the health care privacy laws. However, although Muslim women preferred to make their own health care decisions in this study, 100% of them thought it was "important" to "necessary" for their husband to attend the medical evaluation and treatment session with them.

Domain #5 *Modesty Issues* is important in a medical setting because not all medical clinics provide an environment that supports physical modesty. From the women surveyed in this study, 85.7% wore hijab (head covering) or niqab (veil) in public. All of the women strongly agreed that they would be willing to remove the hijab/niqab in front of a female health care provider, but not a male health care provider.

Domain #6 *High Risk Behaviors* provides information regarding the overall health beliefs of Muslim female patients in the areas of smoking, alcohol use, overeating, and concepts of regular exercise. It is important to note that participants strongly agreed on all the high risk behaviors to be harmful. Regular exercise was also perceived by patients to be beneficial with 23.1% agree and 76.9% strongly agree.

Conclusion

This study suggests that Muslim women (1) prefer to make autonomous health care decisions without the assistance of a male family member, (2) prefer to have a female health care provider, (3) are willing to access medical and rehabilitation services if provided by a female, but not when provided by a male health care provider, (4) believe in the use of prayer, recitation of Quran, fasting, charity to be beneficial to their physical health, and (5) are comfortable with the use of physical touch in medicine and rehabilitation evaluation and treatment, if the provider is female. Suggestions for future research should address specific health care provider outcomes as they pertain to optimal clinical decision making for the Muslim female patient.

Appendices: Tables 1-7

Table 1. ***Demographic Information*** (n=14)

Gender:	
Female	14/14 (100%)
Country of Origin:	
India-Pakistan-Bangladesh/Southeast Asia	13/14 (93%)
Middle East	1/14 (7%)
Marriage Status:	
Married	13/14 (93%)
Single	1/14 (7%)
Language Fluency	
Urdu	14/14 (100%)
English	14/14 (100%)
Practicing Muslim	
Yes	14/14 (100%)
No	0/14
Convert to Islam	
Yes	0/14 (0%)
No	14/14 (100%)
Annual Household Income	
Less than $20,000	0/14 (0%)
$20,000-$40,000	0/14 (0%)
$40,000-$80,000	10/14 (71.4%)
Greater than $80,000	4/14 (28.5%)

Table 2. ***Domain #1:*** **Muslim Beliefs: Spiritual Rituals**

Survey Question	Number of Participants	1= strongly agree 2=disagree 3=neutral 4=agree 5=strongly agree
"I consider myself a practicing Muslim"	14/14	100% - "5" strongly agree
"I believe required prayers are beneficial for my physical health"	14/14	100% - "5" strongly agree
"I believe fasting is beneficial for my physical health"	14/14	100% - "5" strongly agree
"I believe giving zakat/charity is beneficial for my physical health"	14/14	100% - "5" strongly agree
"I believe zum-zum water is beneficial to my physical health"	14/14	100% - "5" strongly agree

Table 3. ***Domain #2:*** **Health Care Practitioner Concepts**

"I would prefer to see a female Health Provider"	14/14 - "5"	100% strongly agree
"If experiencing pain, and given a referral by my physician, I would attend an evaluation and treatment by a Holistic Health Provider"	14/14 - "5"	100% strongly agree
" When being seen by a Health Provider, I am comfortable with therapeutic touch being used as part of evaluation and treatment"	If PT is female = 14/14 If PT is male = 0/14	100% strongly agree, if PT is female 100% strongly disagree, if PT is male
"How important is it that your health care provider is sensitive to your basic religious beliefs?"	1/14= "2" 8/14= "4" 4/14= "5" 1/14= no response	85.7% = "4" or "5" 1= not important 2= somewhat important 3= important 4= very important 5= necessary

Table 4. ***Domain #3:*** **Health Care Practices & Spirituality**

"I believe suffering during illness is good for my health"	1/14 = "1" 1/14 = "2" 8/14 = "3" 4/14 = "5"	71.4% "neutral to strongly agree" 28.6% strongly disagree
"I believe reciting Quran to be beneficial to my physical health"	1/14 = "2" 13/14 = "5"	7.2% disagree 92.9% strongly agree
"Fasting during the month of Ramadan is beneficial to my physical health"	14/14 = "5"	100%
"I believe that visiting the sick has healing benefits for the one visited"	1/13 = "2" 1/13 = "3" 8/13 = "4" 3/13 = "5"	7.7% disagree 7.7% neutral 61.5% agree 23.1% strongly agree

Table 5. ***Domain #4:*** **Family Roles and Organization**

"I believe household duties are primarily my responsibility"	**9/14 = "1" strongly disagree** **5/14 = "5" strongly agree**	**64.3% strongly disagree** **35.7% strongly agree**
"I believe it is the duty of the husband to assist with household chores"	**1/14 = "2"** **8/14 = "4"** **5/14 = "5"**	**7.2% disagree** **57.1% agree** **35.7% strongly agree**
"I believe taking care of my family to be beneficial to my health"	**4/13 = "1"** **7/13 = "3"** **2/13 = "5"**	**30.8% strongly disagree** **23.1% neutral** **15.4% strongly agree**
"How important is it that your husband is allowed to attend medical sessions with you?"	**8/12 = "4"** **4/12 = "5"**	**66.7% very important** **33.4% necessary**
"I make the majority of health care decisions regarding my health care"	**13/14 = "5"** **1/14 = "3"**	**92.9% strongly agree** **7.1% neutral**
"My husband makes the majority of decisions regarding my health care"	**3/14 = "1"** **10/14="3"** **1/14 = "5"**	**21.4% strongly disagree** **71.2% neutral** **7.1% strongly agree**

Table 6. ***Domain #5:*** **Modesty Issues**

"Do you wear hijab (head covering) or niqab (veil) in public?"	**1/14 = "1"** **1/14 = "2"** **12/14 = "5"**	**7.1% never** **7.1% seldom** **85.7% all the time**
"If you wear hijab or niqab, would you be willing to remove it if necessary for evaluation by your health care provider?"	**14/14 = "1"**	**100% strongly disagree**
"If you wear hijab/niqab would you be willing to remove it if necessary for medical treatment with a female health care provider?"	**14/14 = "5"**	**100% strongly agree**

Table 7. ***Domain #6:*** **High Risk Behaviors**

"Do you believe smoking is harmful to your body?"	**14/14 = "5"**	**100% strongly agree**
"Do you believe alcohol is harmful to your body?"	**14/14 = "5"**	**100% strongly agree**
"Do you believe overeating to be harmful to your body?"	**14/14 = "5"**	**100% strongly agree**
"Do you believe regular exercise is necessary to maintain a healthy body?"	**3/14 = "4"** **10/14 = "5"** **1/14 = no response**	**21.6% agree** **71.4% strongly agree**

References

Abushaikha LA,PhD,RN. (2007) Methods of Coping With Labor Pain Used by Jordanian Women .Journal of Transcultural Nursing. 18(1), 35-40.

Al-Sharhri MZ. (2002) Culturally Sensitive Caring for Saudi Patients. King Faisal Specialist Hospital and Research Center. Journal of Transcultural Nursing. 13(2), 133-138.

Belut, E and Ebaugh, HR(2013). Religion and Assimilation Among Turkish Muslim Immigrants: Comparing Practicing and Non-Practicing Muslims. International Migration and Integration. 10(1007), 12134.

Bennoune, K (2007). Secularism and Human Rights: A Contextual Analysis of Headscarves, Religious Expression, and Women's Equality Under International Law. Columbia Journal of Transnational Law. 45(2): 1-60.

Betancourt JR, Green AR, Carillo E, Park ER. (2005) Cultural Competence and Health Care Disparities: Key Perspectives and Trends. Health Affairs. 24(2):499-505.

Blank J. (1998) The Muslim mainstream. US News& World Report. 125(3), 22-25.

Boggatz T, MA,RN, Dassen T, PhD, RN. (2006) Learning the Meaning of Care: A Case Study in a Geriatric Home in Upper Egypt. Journal of Transcultural Nursing. 17(2), 155-163.

Campbell-Heider,PhD, Rejman KP,PhD, Austin-Ketch T,PhD, et al. (2006) Mearuing Cultural Competence in a Family Nurse Practitioner Curriculum. Jouranl of Multicultural Nursing & Health. 12(3), 24-34.

Campinha-Bacote,J. (1994) Cultural competence in psychiatric mental health nursing: A conceptual model. Nursing Clinics of North America. 29(1), 1-8.

Campinha-Bacote J. (1999) A model and instrument for addressing cultural competence in health care.

Journal of Nursing Education. 38, 203-207.

Clouten N,PT,EdD. (2006) Clinical education and cultural diversity in physical therapy: Clinical performance of minority student physical therapists and the expectations of clinical instructors. Physiotherapy Theory and Practice. 22(1), 1-15.

Council of Islamic American Relations. Retrieved February 24, 2007 from http://www.cair-net.org.

Cortis JD,MSc,RGN,RMN,RNT. (2000) Perceptions and Experiences With Nursing Care: A Study of Pakistani (Urdu) Communities in the United Kingdom. Journal of Transcultural Nursing. 11(2), 111-118.

Cross TL,Bazron BJ,Dennis KW,Isaacs MR. (1989) Towards a Culturally Competent System of Care: A Mongraph on Effective Services for Minority Children Who are Severely Emotionally Disturbed Georgetown University, National Technical Assistance Center for Children's Mental Health. Volume 1, 190.

Evans E,PharmD. (2006) Instructional Design and Assessment: An Elective Course in Cultural Competence for Healthcare Professionals. American Journal of Pharmaceutical Education. 70(3), 1-7.

Fagerli RA, Lien M, Wandel M. (2007) Health Care Style and Trustworthiness as Perceived by Pakistani- Born Persons with Type 2 Diabetes in Oslo, Norway. Health: An Interdisciplinary Journal for the Social Study of Health, Illness, and Medicine. 11(1): 109-129.

Fu JH,Chiu CY,Morris MW,Young MJ. (2007) Spontaneous Inferences from Cultural Cues: Varying Responses of Cultural Insiders and Outsiders. Jouranl of Cross-Cultural Psychology. 38(1), 58-75.

Gatrad AR, Sheikh A. (2001) Medical Ethics and Islam. Archives of Disease in Childhood. 84:72-75. Grewal S, MSN,RN, Bottorf JL,PhD, RN, Hilton BA, PhD, RN. (2005) The Influence of Family on Immigrant South Asian Women's Health. Journal of Family Nursing. 11(3), 242-263.

US Department of Heatlh and Human Services. (2007) Healthy People 2010: Understanding and Improving Health. Volume I (second edition). Retrieved April 22, 2007 from http://www.healthypeople.gov/Publications.

Harcourt, BE (2006). Muslim Profiles Post-9/11: Is Racial Profiling an Effective Counterterrorist Measure and Does it Violate the Right to be Free from Discrimination? University of Chicago Law & Economics, Olin Working Paper No. 288.

Hattar-Pollara, DNSc,RN, Dawani H, DNSc, MPH. (2006) Cognitive Appraisal of Stress and Health Status of Wage Working and Nonwage Working Women in Jordan. Journal of Transcultural Nursing. 17(4), 349-356.

Hodge D. (2005) Social Work and the House of Islam: Orienting Practitioners to the Beliefs and Values of Muslims in the United States. Social Work. 50(2), 162-173.

Horenczyk G, Munayer S. (2007) Acculturation Orientations Toward Two Majority Groups: The Case of Palestinian Arab Christian Adolescents in Israel. Journal of Cross-Cultural Psychology. 38(1), 76-86.

Jackson AK. (2007) Cultural Competence in Health Visiting Practice: a Baseline Survey. Community Practitioner. 80(2), 17-22.

Islamic Medical Association (IMANA). 2007. Retrieved May 2007 from http://www.IMANA.org.

Kridli, SA (2011). Health beliefs and practices of Muslim women during Ramadan. MCN American Journal Maternity Child Nursing. 36(4), 222-3.

Kulwicki AD,DNS,RN,Miller J,PhD, Schim S,PhD. (2000) Collaborative Parntership for Culture Care: Enhancing Health Services for the Arab Community. Jouranl of Transcultural Nursing. 11(1), 31-39.

Lawrence P, MSN,RN, & Rozmus C,DSN,RN. (2001) Culturally Sensitive Care of the Muslim Patient.

Journal of Transcultural Nursing. 12(3), 228-233.

Leavitt RL,PT,PhD,MPH. (2002) Developing Cultural Competence in a Multicultural World. Continuing Education Article Part I. Physical Therapy Magazine.

Leininger,M. (1995) Overview of Leininger's Culture care theory. Transcultural Nursing: Concepts, theories, research and practices(2nd ed). New York: McGraw-Hill. pp. 93-111.

Miller JE, PhD, RN, Petro-Nustas W,RN,ScD.(2002) Context of Care for Jordanian Women. Journal of Transcultural Nursing. 13(3), 228-236.

Musaiger AO, Shahbeek NE. (2001) The Effect of Education and Obesity on Attitudes Towards Fads Related to Weight Reduction Among Arab Women in Qater. Nutrition and Food Science. 31(4), 201-204.

Nahas V, PhD,RN, Amasheh N,RN (1999) Culture Care Meanings and Experiences of Postpartum Depression Among Jordanian Australian Women: A Transcultural Study. 10(1), 37-45.

Nimer M. (2002) The North American Muslim Resource Guide: Muslim Community Life in the United States and Canada. New York, New York: Routledge.

Noah, BA (2008). A Prescription for Racial Equality in Medicine. Connecticut Law Review. 40(3), 675-712.

Parkinson, P (2011). Accommodating Religious Beliefs in a Secular Age: The Issue of Conscientious Objection in the Workplace. University of New South Wales Law Journal. 34(1), 281-299.

Pew Research Center's Forum on Religion & Public Life. The Future of the Global Muslim Population, 2011.

Powell, C (2005). Lifting our Veil of Ignorance: Culture, Constitutionalism, and Women's Human Rights in Post-September 11 America. Hastings Law Journal. 57, 331-385.

Power P, Joseph N, & Rhodes S.(1998) The New Islam. Newsweek. 131(11), 34-37.

Portney LG,Watkins MP. (2000) Foundations of clinical research: Applications to practice. Upper Saddle River,NJ: Prentice Hall Health.

Pruitt, LR (2012). CEDAW and Rural Development: Empowering Women with Law from the Top
Down, Activism from the Bottom Up. Baltimore Law Review. 41, 263-324.

Purnell L. (2005) The Purnell Model for Cultural Competence. Journal of Multicultural Nursing and Health. 1-15.

Sandstrom RW. , Lohman H, and Bramble JD. Health Services: Policy and Systems for Therapists. Prentice Hall (1st ed).

Shaya F, PhD,MPH, Gbarayor CM, MPH. (2006) The Case for Cultural Competence in Health Professions Education. American Journal of Pharmaceutical Education. 70(6), 1-6.

Sondos IMS, Johnson CA. (2005) Influence of known psychosocial smoking risk factors on Egyptian Adolescents' Cigarette Smoking Behavior. Health Promotion International. 20(2), 135-145.

Strategic Plan on Cultural Competence. (2006) American Physical Therapy Association. Information retrieved on April 22, 2007 from
http://www.apta.org/AM/Template.cfm?Section=resources5&CONTENTID=14668&TEMPLATE=/CM/C
ontentdisplay.cfm

Tartaro J, Luecken LJ, Gunn HE. (2005) Exploring Heart and Soul: Effects of Religiosity/Spirituality and Gender on Blood Pressure and Cortisol Stress Responses. Journal of Health Psychology. 10(6), 753-766.

Van Den Brink Y, DrsNSc,RN. (2003) Diversity in Care Values and Expressions Among Turkish Family Caregivers and Dutch Community Nurses in the Netherlands. Journal of Transcultural Nursing. 14(2), 146-154.

Varcoe C. (2006) Doing Participatory Action Research in a Racist World. Western Journal of Nursing Research. 28(5), 525-540.

Wandler, HA (2012). The Role of Culture in Advocating for Accurate Diagnosis and Rating of Veterans' Psychological Disabilities. Mental Health Law & Policy Journal. 2(1):1-42.

Wing, AK, and Smith, MN (2005). Critical Race Feminism Lifts the Veil? Muslim Women, France, and the Headscarf Ban. UC Davis Law Review, 39(3), 743-792.

Winslow WW, Honein G, Elzubeir MA. (2002) Seeking Emirati Women's Voices: The Use of Focus Groups with an Arab Population. Qualitative Health Research. 12(2), 566-575.

Yosef, ARO (2008). Health Beliefs, Practice, and Priorities for Health Care of Arab Muslims in the United States. Implications for Nursing Care. 19(3), 284-291.

Ypinazar VA, Margolis SA. (2006) Delivering Culturally Sensitive Care: The Perceptions of Older Arabian Gulf Arabs concerning Religion, Health , and Disease. Qualitative Health Research.16(6), 773- 78.