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Measuring physicians' religious competence in clinical health communication context: female Muslim immigrant patients' expectations

Rukhsana Ahmed and Yuping Mao

Abstract

Purpose – *This exploratory study aims to examine female Muslim immigrant patients' expectations of physicians' religious competence during clinical interactions.*

Design/methodology/approach – *In total, 101 female Muslim immigrants in Ottawa, Canada, completed an eight-item survey measuring patients' expectations of physicians' religious competence during clinical communication.*

Findings – *Results from the independent samples t-tests and one-way ANOVA suggested that female Muslim immigrant patients in this study expected their doctors to be aware of Islam as a religion and be sensitive to their religious needs, especially food/dietary practices during clinical communication. Although the participants did not differ in their expectations of physicians' religious competence based on age, educational level, employment status and income level, they differed based on their frequencies of visiting doctors and their ethnic/cultural origin.*

Originality/value – *This study fills a gap in the literature by advancing understanding of religious competence during clinical interactions from female Muslim immigrant patients' perspective. The findings can contribute to developing religiously competent and accessible health-care services for religiously diverse populations.*

Keywords *Immigrants, Islam, Religious beliefs, Clinical health communication, Female Muslim patients, Religious competence*

Paper type *Research paper*

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Introduction

With rising global migration, health-care professionals face the challenge of providing effective and appropriate care to patients from diverse backgrounds. Cultural differences and language barriers have been found to impact clinical interactions between patients and health-care providers (Alizadeh and Chavan, 2016). Muslims living in western countries (rapidly growing minority population) often face challenges and barriers when trying to access health care (Ganle, 2015). These barriers include socioeconomic status, language, religious beliefs and cultural values. There must be an increased level of awareness among health-care providers to adequately meet the unique needs of this population and provide appropriate health-care services (Inhorn and Serour, 2011). While limited research exists on the health-care needs of Muslim immigrants, health-care issues faced by Muslim women living in western countries are rather unknown. The scant extant literature underscores the importance of considering the culture of Muslim immigrant women and how it impacts their health-care issues (Palomares *et al.*, 2020; Simpson and Carter, 2008), health-care implications for providers' lack of knowledge about Islamic culture (Tsianakas and Liamputtong, 2002) and the significance of culturally sensitive

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health care for Muslim immigrant women (Blankinship, 2018; Roberts, 2003). Ganle (2015) recommended cultural competence training for health-care providers to meet Muslim women's care needs and provide them with better experiences. The current study focuses on examining Muslim immigrant women's expectations of their doctors' religious competence in clinical interactions.

Any health-care system is multicultural because it deals with numerous regional, ethnic, racial, socioeconomic, occupational, generational and health status orientations (Kreps and Kunimoto, 1994). In a multicultural health-care setting, patient beliefs need to be considered as important dimensions of their personal experience. While educational background, age, gender, worldviews and other personal factors shape patients' health-related beliefs and expectations, religious orientations are no less important considerations in shaping these perceptions, beliefs and expectations (Koenig, 2013). The sensitivity of religious competence plays an important role in the doctor–patient relationship and consultation quality, which requires more scholarly inquires that can guide effective clinical practices. Within the broader health-care literature, extant research has examined issues of cultural competence in the context of clinical health communication. These studies have focused on cultural competence outcomes in health-care contexts and providers' cultural competence, including that of physicians (Ahmed and Bates, 2007, 2010, 2017; Ahmed *et al.*, 2016; Carmack and Ahmed, 2019), nurse practitioners (Castro and Ruiz, 2009), counsellors (Constantine, 2002), and therapists (Fuertes *et al.*, 2006). Our study will expand this line of research by examining physicians' religious competence from patients' perspective.

Literature review

Religion and health

Religion is an important component of individuals' spiritual activities. While a plethora of literature indicates a positive correlation between religiosity and mental health (Whitley, 2012), there is also evidence that some religious practices and beliefs can impair psychological well-being (Exline and Rose, 2005; Cashwell *et al.*, 2007). Religiosity is also found to be positively associated with physical health and well-being in multiple studies (Koenig and Cohen, 2002). Given the important role of religion in mental and physical health, it is important for health-care practitioners to consider patients' religious background during medical communication and shared medical decision-making.

Religion and multicultural health-care setting

Health-care systems in immigrant-receiving countries such as the USA and Canada serve a diverse population. Research on multicultural competency in health care focuses primarily on ethnic and racial diversity, whereas issues of spiritual and religious diversity are not well researched or adequately addressed (Frazier and Hansen, 2009). Today's multicultural health-care settings call for competent and appropriate health-care services to meet the diverse needs of different immigrant and ethnic/cultural groups (Mao and Ahmed, 2018). In particular, few studies have been conducted to understand how culture (Simpson and Carter, 2008) and health-care providers' lack of knowledge about Islamic culture (Tsianakas and Liamputtong, 2002) impact the health care received by female Muslim immigrants (Roberts, 2003). Patient expectation is a cornerstone of patient satisfaction during clinical interactions (Berhane and Enquselassie, 2016). There is a burgeoning body of research on patients' reporting of provider's cultural competence in the US health-care system, primarily based on the patient experiences of Caucasian-Americans, African-Americans, non-Hispanic whites and Asian Americans (Alizadeh and Chavan, 2016). However, research on female Muslim immigrants' experiences and expectations of their health-care providers' cultural competence remains scarce.

Islamic beliefs and health

Religious belief is an important component of cultural beliefs. Whitley (2012) clearly pointed out that religious competence is an important conceptual dimension of cultural competence "as individual religious orientation infuses patients' beliefs, values, attitudes, and conventions" (p. 250). Spiritual and religious competencies are defined as "a set of attitudes, knowledge, and skills in the domains of spirituality and religion" that health-care practitioners should effectively and ethically practice (Vieten *et al.*, 2013, p. 133). Salman and Zoucha (2010) underscored the importance of understanding religious faith as an important aspect of promoting culturally competent care. It is imperative for health-care practitioners to be aware of patients' religious and cultural backgrounds (Amin and Abdelmageed, 2020; Furqan *et al.*, 2019).

In particular, health-care practitioners need to incorporate Islamic religious beliefs and cultural practices into considerations for implementing health interventions for female Muslim immigrants. Such interventions can facilitate the delivery of appropriate and effective care and motivate healthy behaviors, because Islamic beliefs along with other cultural norms impact Muslim women's health beliefs and practices in various ways (Pathy *et al.*, 2010; Salman and Zoucha, 2010). The Islamic faith is considered a unique culture and philosophy of life, a complete way of life from birth to death (Salman and Zoucha, 2010). Some Islamic rituals and beliefs could impact Muslim women's health practices and outcomes. For instance, traditional Muslim generic (folk) care beliefs, expressions and practices contribute to Muslim women's expectation and understanding of the caregiving process, health, illness, dietary needs, dress, privacy, modesty, touch, gender relations, eye contact, abortion, contraception, birth, death and bereavement (Wehbe-Alamah, 2008). To further illustrate, although clear exemptions exist in Islam "from fasting in Ramadan during sickness, pregnancy, and breastfeeding [...] some Muslim women still elect to fast while sick, pregnant, or breastfeeding because of a confluence of social, religious, and cultural factors" (Kridli, 2011, p. 216).

Research context

Muslims are the largest and fastest growing religious population group among all the non-Christian religious groups in Canada (NHS, 2011; Tackett *et al.*, 2018). In the 2001 census, 579,640 Canadians of Islamic faith self-identified as Muslims (Statistics Canada, 2005), and this number was increased to be over one million within a decade according to the 2011 National Household Survey (NHS, 2011). By 2030, the number of Muslims living in Canada is expected to reach around 2.7 million (Lewis, 2011) With the increasing Muslim population, it is important for health-care practitioners to understand the unique health needs and communication behaviors of Muslim patients to provide appropriate and effective health-care services. Examination of female Muslim immigrant patients' expectations of physicians' religious competence and understanding of the culturally diverse health care needs of this rapidly growing community (Hamdani, 2004; Statistics Canada, 2013), during clinical communication, is thus useful to explore. Against this backdrop, the current study aims to contribute important empirical evidence that can aid health-care organizations serving this group in Ottawa, Canada, and beyond to evaluate and improve the quality of care. Taking a patient-centered approach, we focus on assessing female Muslim immigrant patients' expectations of physicians' religious competence during clinical interactions. Specifically, we ask the following two research questions:

RQ1. What do female Muslim immigrant patients expect from their physicians during clinical communication?

RQ2. What are the sub-group differences among female Muslim immigrant patients in their expectations of their doctors' religious competence during clinical communication?

Methodology

This study is part of a larger project aimed at examining the health beliefs and health-seeking behaviors of female Muslim immigrants in Canada. The larger project used a mixed-methods research design (Creswell, 2014), combining focus group discussions and surveys in two sequential phases. Four focus groups were conducted in the summer months of 2011, with 21 Muslim immigrant women living in Ottawa. Based on the major topics for discussion, including health beliefs, behaviors and practices, it was revealed that participants made specific cultural and religious attributions to illness or disease and emphasized the need for physicians to develop knowledge about patients' deeply held religious and cultural beliefs. The procedures and results for the focus groups in the qualitative phase are described in detail elsewhere (Ahmed and Mao, 2022). To further explore religiously different patients' needs, the current study reports survey results from the quantitative phase in which participants responded to survey questions related to their expectations of physicians' religious competence during clinical interactions.

Participants

In total, 101 Muslim women in the Ottawa region completed the survey from April 2011 to April 2012. About half of the participants (N = 52, 51.5%) were between the ages of 30 and 49, 44 participants (43.5%) were between 18 and 29 and a few (N = 5, 5%) were above 50. The participants immigrated to Canada from different regions: Somali (N = 21, 20.8%), Southeast Asia (N = 4, 4%), Middle Eastern/Arab region (N = 26, 25.7%), African countries (N = 30, 29.7%) and South Asia (N = 20, 19.8%). About half (N = 55, 54.5%) of the participants had college degree or above, and the rest did not have college degree (N = 46, 45.5%). The participants came from diverse social-economic backgrounds with different employment statuses and family incomes. Table 1 includes the participants' demographic information.

Procedures

Survey participants for this study were recruited through purposive and snowball sampling (Patton, 1990). This allowed to lower search costs and minimize recruitment bias while maintaining privacy and confidentiality (Penrod *et al.*, 2003). Women were eligible to participate in this study, if they self-identified as Muslim, were foreign born, had lived in Ottawa, Canada, for at least one year, visited a health-care provider for herself or a family member at least once in the past year and were able to communicate their experience in English. Following approval by the Research Ethics Board, participants were recruited from Ottawa, a culturally and religious diverse city in Canada. Participants began by completing a consent form, which ensured voluntary participation and confidentiality. As compensation for their participation, survey participants received CAD15.

Ethical issues in the research were addressed in several ways. For example, building on the first author's extensive experience conducting surveys with marginalized populations in previous projects, including refugees and immigrants, care was taken when gathering survey data for this study. This process included assuring participants that their involvement in the study was strictly voluntary, and that they could decline participation or withdrew at any point. To mitigate any risk of indirect identification related to the demographic questions of the study, data were kept confidential, and answers to the socio-demographic portion of the study have been reported in aggregate form only. Finally, a debriefing form was used to clarify the purpose of the study, reassure respondent confidentiality and the voluntary nature of participation and thus facilitating engagement and building trust in participants.

Survey instrument

This study used the Physician's Religious Competence Scale (PRCS) to assess essential elements of female Muslim immigrant patients' expectations of physicians' religious

Table 1 Participants' demographic information

Demographics	N *(%)*
Age	
18–27	44 (43.6)
30–49	52 (51.5)
50–64	4 (4.0)
65 and above	1 (1)
Cultural origin	
Somali	21 (20.8)
Southeast Asian	4 (4.0)
Middle Eastern/Arab	26 (25.7)
African	30 (29.7)
South Asian	20 (19.8)
Educational level	
With college degree of above	55 (54.5)
With college degree	46 (45.5)
Employment	
Homemaker (stay-at-home mom)	11 (10.9)
Student	20 (19.8)
Employed for wage	45 (44.6)
Out of work but not currently looking for work	15 (14.9)
Self-employed	2 (2)
Unable to work	1 (1)
Retired	4 (4)
Household annual income	
Less than CAD10,000	16 (15.8)
CAD10,000–CAD19,999	15 (14.9)
CAD20,000–CAD29,000	10 (9.9)
CAD30,000–CAD39,999	15 (14.9)
CAD40,000–CAD49,999	6 (5.9)
CAD50,000–CAD59,999	8 (7.9)
CAD60,000–CAD69,999	2 (2)
CAD80,000 or more	11 (10.9)

competence during clinical communication with physicians. This eight-item PRCS was part of a 55-item paper-based survey questionnaire, which was used in the larger project. Alongside five socio-demographic questions, the PRCS consists of eight original survey items. These survey items were informed by evidence in existing literature on patient preferences for physician inquiry about spirituality or religious beliefs as appropriate (McCord *et al.*, 2004), patients' perceptions of physicians' cultural competence scales (Ahmed and Bates, 2012) and focus group findings from the larger study that was related to Muslim immigrant women's perceptions of and experiences with culturally and religiously appropriate care in the clinical context. Specifically, the survey items included statements on patients' expectations of doctors' awareness and knowledge of religious differences, skills to treat Muslim patients and doctors' initiation of asking patients about their religious background in relation to health and health behaviors, all of which reflected the purpose of this study. Based on their perceptions and opinions, participants needed to choose one of the following options on a five-point Likert-type scale: "a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree." All eight items can be found in Table 2.

Data analysis

First, descriptive statistics were performed to summarize key information of the sample of this study. Second, factor analysis and correlation analysis were performed to test the eight-item

Table 2 Factors on the PRCS

Question	*Component loading*	*Communality extraction*	*Mean*	*SD*
Q3. My doctor should be knowledgeable about my religion	0.93	0.86	3.40	1.19
Q1. My doctor should make an effort to understand religious differences	0.87	0.75	3.46	1.22
Q5. My doctor should be well-trained to treat patients of my religious background	0.85	0.73	3.47	1.19
Q4. My doctor should understand my religion's specific characteristics	0.85	0.72	3.30	1.22
Q6. My doctor should possess the skills that are needed to treat patients from my religious background	0.85	0.72	3.41	1.25
Q2. My doctor should be aware of the views that he or she may have toward my religion	0.85	0.72	3.60	1.15
Q7. My doctor should ask me about my religious beliefs related to health care	0.68	0.46	3.56	1.12
Q8. My doctor should ask me about my food/dietary practices	0.50	0.25	4.17	1.01
Eigenvalue		5.21		
% of variance		65.10		
Cronbach's α		0.92		

scale to measure female Muslim immigrant patients' expectations of physicians' religious competence during clinical communication. The five-point Likert scale was reversely coded for the analysis:

1. represented strongly disagree;
2. represented disagree;
3. represented not sure;
4. represented agree; and
5. represented strongly agree.

Finally, *t*-tests and one-way ANOVA were used to answer the research questions.

Factor analysis of the Physician's Religious Competence Scale

After 101 participants completed the scale, the items were analyzed through factor analysis and reliability procedures. The factor analysis used principal axis factoring procedures with varimax rotation. The Bartlet test of sphericity suggested that the data met assumptions necessary for factor analysis, $\chi^2 = 544.258$ (28), $p < 0.001$. Using the Kaiser–Guttman retention criterion of eigenvalues greater than 1.0, the scree plot and eigenvalue score (eigenvalue = 5.21) show the eight items belong to one factor (Table 2). The eight items accounted for 65.1% of the total variance. The items were analyzed to determine whether the scale was a reliable assessment of patients' expectation of doctors' religious competence. Cronbach's α reliability estimate showed strong internal consistency for the scale ($\alpha = 0.92$). The reliability of the scale could not be improved by eliminating one or more questions. Finally, Pearson's correlations were calculated for each pairwise combination of factors on the PRCS. As each survey item was significantly correlated with other items, participants' expectation of doctors' religious competence is best described by the above one-factor solution. Correlation results are reported in Table 3. Therefore, in further analyses, to answer the research questions, the eight survey items were treated as a one-factor scale on physicians' religious competence.

Findings

The findings of this study are presented to answer the two research questions posed: what do female Muslim immigrant patients expect from their physicians during clinical communication and what are the sub-group differences among female Muslim

Table 3 Correlations between factors on the PRCS

	Q1	*Q2*	*Q3*	*Q4*	*Q5*	*Q6*	*Q7*	*Q8*
Q1	1	0.77**	0.78**	0.65**	0.63**	0.61**	0.57**	0.42**
Q2		1	0.76**	0.66**	0.64**	0.69**	0.49**	0.32**
Q3			1	0.81**	0.78**	0.73**	0.58**	0.36**
Q4				1	0.73**	0.71**	0.41**	0.27**
Q5					1	0.75**	0.49**	0.36**
Q6						1	0.49**	0.34**
Q7							1	0.44**
Q8								1

Note: **Correlation significant at 0.01 level (two-tailed)

immigrant patients in their expectations of their doctors' religious competence during clinical communication.

Female Muslim immigrant patients' expectations of physicians during clinical communication

Overall, participants showed a certain degree of agreement (mean ranges from 3.30 to 4.17 among the eight survey items) that they expected their doctors to understand Islam as a religion and be sensitive to religious differences in their interactions with Muslim women. In particular, participants strongly agreed that doctors should ask them about food/dietary practices (M = 4.17, SD = 1.01). Participants' opinions on each survey items can be found in Table 2.

Sub-group differences among Muslim immigrant patients in their expectations of doctors' religious competence during clinical communication

A few independent samples *t*-tests were conducted to compare group differences on expectations of doctors' religious competence. No significant difference was found between the age group of 18–29 and that of 30 years old or above on the overall PRCS and each item in the scale. No significant difference was found between individuals without college degree or those with a college degree or above either. Participants who are employed or retired seem to have similar level of expectations of their doctors' religious competence. No significant difference was found between participants with a household annual income higher than CAD30,000 and those with lower household annual income. Participants with a family doctor did not differ from those without a family doctor in their expectations of doctors' religious competence.

Participants who visited doctors six times or above per year tended to have significantly higher expectations (M = 3.87, SD = 0.71) of doctors' religious competence than those with a smaller number of visits to doctors (M = 3.43, SD = 1.01): $t = 2.06$ (91), $p < 0.05$. Participants differed by their numbers of visits to doctors, in the statements on their expectations of doctors' awareness of their own views toward Islam ($t = 2.72$, df = 65.29, $p < 0.05$), doctors' knowledge of Islam ($t = 2.54$, df = 97, $p < 0.05$), doctors' understanding of specific characteristics of Islam ($t = 2.07$, df = 97, $p < 0.05$) and doctors' skills to treat patients with Muslim faith ($t = 2.30$, df = 54.38, $p < 0.05$). Specific significant differences in individual items are summarized in Table 4.

A one-way ANOVA was used to determine whether significant differences in expectations of doctors' religious competence existed between groups from different ethnic/cultural origins. The omnibus *F*-test was significant, F = 4.377 (4, 88), $p < 0.01$, which means that significant differences were present. Bonferroni *post hoc* tests, with α set at 0.01 to adjust for familywise inflation of α, were used to test for mean differences between groups. Participants from Somali

Table 4 Group differences by number of doctor visits

	With 6 or more doctor visits		*With 0–5 doctor visits*		*Significance*
	Mean	*SD*	*Mean*	*SD*	*(2-tailed)*
Q2. My doctor should be aware of the views that he or she may have toward my religion	4.03	0.94	3.42	1.18	0.015
Q3. My doctor should be knowledgeable about my religion	3.86	1.03	3.21	1.20	0.013
Q4. My doctor should understand my religion's specific characteristics	3.69	1.11	3.14	1.23	0.041
Q6. My doctor should possess the skills that are needed to treat patients from my religious background	3.81	0.96	3.26	1.32	0.048

Note: Only survey items with significant differences ($p < 0.05$) are included in this table

(M = 3.84, SD = 0.71) and Middle Eastern/Arab (M = 3.83, SD = 0.93) background had significantly higher levels of expectations of their doctors' religious competence than participants from African countries (M = 2.99, SD = 1.01).

Discussion

This study sought to fill a gap in the literature by exploring patient expectations of physicians' religious competence during clinical interactions. Specifically, the study provides empirical evidence on female Muslim immigrant patient's expectations of physicians' religious competence during clinical communication. The survey findings suggest that female Muslim immigrants in this study expect their doctors to understand Islam as a religion and be sensitive to religious differences during their interactions with them. This finding coincides with the suggestion Saritopark (2020) put forward about understanding the role that religion/spirituality plays in the ways Muslims cope with health issues that can foster higher quality and more culturally sensitive care.

Earlier research has documented that Muslim immigrant patients hold unique beliefs and attitudes related to diet (Hammoud *et al.*, 2005). Female Muslim immigrants in the study share the strong opinion that doctors should be sensitive to their religious needs and especially ask them about food/dietary practices during clinical communication. This finding underscores recommendations from past research regarding the importance for health-care providers to demonstrate during medical consultations that they understand and respect female Muslim immigrant patients' food habits and preferences (Kridli, 2011; Ludwig *et al.*, 2011). As highlighted by Goody and Drago (2009), such clinical health communication can make "clients feel as if they have been understood and their beliefs, behaviors, and values have been respected" (p. 44), which in turn can result in improved health outcomes.

Although no significant differences were found based on age, educational level, employment status and income level, overall, the findings reveal female Muslim immigrants in this study differed in their expectations of health-care providers' religious competence based on their ethnic/cultural origin. For example, participants from Somali and Middle Eastern/Arab background tended to have significantly higher levels of expectations of their doctors' religious competence than participants from African countries. These findings support the emphasis existing research places on health-care providers, including doctors and nurses, to consider differences among Muslim population, attributing to factors such as their cultural background, languages and countries they reside in (Bagastra, 2020).

Meeting the religious needs of diverse patient populations can be regarded as patient-centered care that may reflect positively on health consequences of these patients. Whitley (2012) argued "Attention to religion can aid in the development of culturally competent and

accessible services, which in turn, may increase engagement and service satisfaction among religious populations" (p. 245). When individuals immigrate to a new country, their acculturation involves constant negotiation between maintaining their cultural heritage and adopting the host countries' cultural practices (Berry, 2009). The current study found that female Muslim immigrants who visited doctors more frequently (six times or above per year) tended to have significantly higher expectations of doctors' religious competence than those who visited their doctors less frequently. This finding raises important question regarding the relationship between female Muslim immigrants' acculturation in the medical culture and their expectation of health-care providers' religious competence.

Limitations and direction for future research

Although this study is one of the first attempts at examining female Muslim patients' expectations of physicians' religious competence, the findings should be interpreted in light of certain limitations. For example, the sample size is relatively small and was recruited within one city and thus limiting the generalizability of the findings. Future research should recruit a larger sample from other geographical areas. Future research might further examine the sub-cultural group differences among female Muslim immigrants to probe more deeply into their expectations of religiously competent health care. For example, future research could investigate how the variation in practicing Islam (e.g. observing Islamic traditions) in combination with other social and cultural factors can affect patients' expectations in their clinical communication with health-care providers, as well as their health habits that lead to different health outcomes. Moreover, although this study relied on quantitative data, future research can incorporate follow-up qualitative data to complement the less quantifiable details.

Implications and conclusions

This study aimed at examining female Muslim immigrant patients' expectations of physicians' religious competence during clinical interactions. Religious competence in clinical health communication can result in improved health-care delivery by reducing medical errors, promoting early patient discharge and establishing reliable communication between patient and health care provider (Swihart *et al.*, 2020). The findings of the current study have practice implications for complex clinical communication involving doctors and nurses who are the health-care providers that patients seem to have frequent clinical interactions with. To fully incorporate religious diversity in the current medical system, adequate training needs to be provided for health-care practitioners at different stages of their professional trainings, including undergraduate education, postgraduate training and continuing professional development (Whitley, 2012). The study findings help advance the scope of multicultural health communication by measuring female Muslim patients' expectations of physicians' religious competence during clinical interactions in a Canadian context. This extension has important practice implications for designing religiously competent patient–provider communication interventions. To meet the unique religious needs of their patients, providers need to be empowered with the knowledge, understanding, the required sensitivity, skills and training.

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