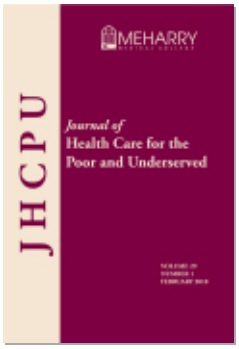
Health and Well-being of Women Migrating from Predominantly Muslim Countries to the United States



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ORIGINAL PAPER

Health and Well-being of Women Migrating from Predominantly Muslim Countries to the United States

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Abstract: The purpose of this study was to examine the health and well-being of women migrating from predominantly Muslim countries to the U.S. Women from predominantly Muslim countries completed a paper survey on the following topics from June to December in 2016 (N=102): depression; physical functioning; self-reported general health; experiences with health care; and demographic characteristics. There were several women's health-related issues: low rates for mammography and Pap smear screening, and preference for female physicians and/or physicians from the same culture. Only one-third of the participants had received a physical exam in the past year, and having done so was related to higher levels of depression and worse physical functioning. The participants who were not in a refugee camp reported higher levels of depression than those who were.

Key words: Immigrant women, Muslim, depression, self-reported health, patient experience, preventive care.

More than 200 countries in the world have Muslim populations.[1] In 2010, there were 1.6 billion Muslims, accounting for 23% of the world population.[2] Some countries—Somalia (98.5%), Sudan (71.3%), and Iraq (99%)—have a high percentage of Muslim citizens. Individuals who have migrated to the United States (U.S.) from the predominantly Muslim countries are often refugees or asylum seekers due to the

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political conflicts and/or wars in these countries.[1,3,4] While the number of immigrants from predominantly Muslim countries to the U.S. has been increasing since 1980, these immigrants often experience poverty in the U.S.[4] In 2013, 30% of immigrants from the Middle East or North Africa to the U.S. lived in poverty, while the poverty rate was 19% among the total immigrant population and 15% among the U.S.-born population.[4] In addition, since the terrorist attacks of September 11th, 2001 in the U.S., immigrants from predominantly Muslim countries have experienced concerns about how their ethnic and/or religious backgrounds are perceived in U.S. society.[5]

An important factor for refugees from predominantly Muslim countries was cultural transition during resettlement.[6] Cultural transitions are especially challenging for women who seek to balance new freedoms and family dynamics while maintaining traditional culture ideals and gender roles.[7] Additionally, women are less likely to have autonomy to make decisions on voluntary migration than men because of women's subordinate status in family and society.[8] As a result, men are more likely to be primary persons who make the decision on migration, while women often just follow the decision made by men.[8] Due to the pre-migration situations, women often have a limited ability to integrate and settle in a new country, making them vulnerable in numerous ways relating to health.[8]

In a health care setting, it is important for providers to understand the health beliefs of refugees and immigrants. Information and services about preventive health care should be accessible and culturally appropriate for these populations.[9] For example, new Somali refugees often face difficulties understanding the prenatal care in the Western health care system.[10] Another study conducted in Canada reported that religious and cultural beliefs influence decisions on cervical cancer screening among Muslim immigrant women, because female family physicians are not always available.[11] Additionally, Muslim immigrant women often do not feel comfortable having a male physician due to religious and cultural beliefs.[11] Furthermore, the intention to participate in mammography is associated with religious beliefs among American Muslim women.[12] More generally, American Muslim women tend to delay seeking care due to perceived lack of female physicians.[13] Additional studies on American Muslim women may help providers and policymakers be more aware of the health concerns of this population.

Getting mental health services is especially difficult for women who migrated from predominantly Muslim countries. Refugee women from countries at war (such as Iraq or Somalia) often experience posttraumatic stress disorder (PTSD), anxiety, and depression but do not utilize mental health care services due to stigma surrounding mental health problems or lack of insurance.[14] Because they may not recognize the roles of mental health professionals, members of Somali communities in the U.S. tend to be hesitant to use mental health services and express concerns about stigma in relation to mental illness.[15] A study of Sudanese and Somali refugees in Canada indicated that these populations often experience the lack of social support and access barriers to services and resources.[16]

Although there have been previous efforts to improve health and well-being of women from predominantly Muslim countries, these populations are still under-studied in connection with the U.S. health care system. Thus, the purpose of this study was to examine the health and well-being of women migrating from predominantly Muslim

countries to the U.S. The U.S. is one of the countries that accept a large number of refugee resettlements and immigrants from predominantly Muslim countries.[17] The information from this study will be useful to improve access to health care services and health outcomes for women from predominantly Muslim countries. This study in particular focused on self-reported health status including depression, physical functioning, and general health and experiences in health care.

Methods

Study population and data collection. This study was approved by the University's Institutional Review Board (IRB) and conducted in a metropolitan area of an intermountain state. Participants were women (1) migrating from predominantly Muslim countries such as Somalia, Sudan, and Iraq; (2) ages 18 or older; and (3) who spoke English or Arabic. All documents, including a self-administered survey instrument, a consent cover letter, and a recruitment flyer were made available in English and Arabic. A bilingual speaker translated English materials into Arabic. Another bilingual speaker back-translated Arabic materials into English and checked translation accuracy. Paper surveys were administrated at a mosque, community health fairs, and community organizations that serve refugee populations from June to December 2016. The surveys were collected by students who were Muslim or refugees, or who were familiar with immigration processes from predominantly Muslim countries. Some of the students spoke Arabic well enough to conduct the surveys in Arabic. The survey did not ask for any identifiable information. Consent was obtained from each participant using a consent cover letter. Participants received a small gift, of approximately US$1 value, upon the completion of the survey.

Measures. *Depression*. Levels of depression was measured using the Patient Health Questionnaire (PHQ-9) which is a nine-item questionnaire with a four-point Likert scale (from 0 = not at all to 3 = nearly every day). The PHQ-9 asks how often a participant has been afflicted by various types of problems including "little interest or pleasure in doing things," "feeling tired," or "having little energy, and poor appetite or overeating" in the past two weeks. The levels of depression that the PHQ-9 scoring suggests are as follows: minimal, 0 to 4; mild, 5 to 9; moderate, 10 to 14; moderately severe, 15 to 19; and severe, 20 to 27.[18] In other words, higher scores indicate higher levels of depression. The PHQ-9 scores were used for determining the overall level of self-reported depression and were not verified by a clinician. Thus, the raw PHQ-9 scores (continuous values), rather than the depression categories, were used for analysis. The PHQ-9 is a valid and reliable tool and has been used previously.[19] Cronbach's alpha for this sample was .901 and was highly reliable.

Physical functioning. The 36-item Short Form Survey Instrument (SF-36) has 10 items to measure physical functioning (e.g., "Does your health now limit you in . . . lifting or carrying groceries?"—Yes, limited a lot; Yes, limited a little; No, not limited at all). The SF-36 is widely used to measure health and well-being of adults.[20] The SF-36 has a scoring method that converts each sub-scale score ranging from 0 to 100.[21] Higher scores indicate better health status. Cronbach's alpha for this sample was .986 and was highly reliable.

General health. General health was measured by the first item of the SF-36: "In general, would you say your health is: . . . " using a 5-point Likert scale (1 = excellent, 5 = poor).

Experiences in health care. The following information related to health care was collected by the survey: health insurance status, dental insurance status, physical examination in the past year, emergency department visit in the past year, preference for a female physician, preference for a physician from the same cultural background, mammogram in the past three years, and Pap smear in the past three years.

Socio-demographic characteristics. Participants were asked questions about the following socio-demographic characteristics: age, years in the US, educational attainment, marital status, reasons for leaving a home country, ethnicity, religion, housing situation, and automobile ownership.

Data analysis. Data were analyzed using SPSS (version 22; SPSS, Inc., Chicago, IL). Descriptive statistics were used to describe the distribution of the demographic characteristics of the participants, health care related experiences, self-reported general health, depression, and physical functioning. Multiple regression was run to test the association between depression (dependent variable) and socio-demographic characteristics, health care related experiences, and self-reported general health. In addition, another multiple regression using physical functioning as a dependent variable was conducted to observe whether different independent variables were associated with physical well-being compared to mental health well-being. Some of the demographic characteristics, and health care related experiences (e.g., preference for a female physician) were not included based on multicollinearity tests.

Results

Table 1 displays socio-demographic characteristics of participants (N=102) and descriptive statistics. The average age among the participants was 42.01 (SD=17.78). On average, the participants had lived in the U.S. for 7.86 years (SD=4.32). Eighty percent of the participants completed the survey in English. A quarter of the participants (26.5%) had a high school diploma or some level of higher educational attainment. Nearly 70% of the participants (66.7%) were married. Approximately 40% of the participants (38.2%) had full-time employment. Sixty percent of the participants had resided in a refugee camp. War was the most common reason for leaving a home country (69.6%). Somali was the most common ethnicity among the participants (41.2%) followed by Sudanese (23.5%), Iraqi (15.7%) and Syrian (14.7%). Slightly over 70% of the participants were Muslim (71.6%). Others were mostly Christian. House ownership was 5.5%. More than 75% of the participants or their family own a car (76.5%).

About 15% of the participants reported having no health insurance (13.7%). Slightly more than half of the participants had dental insurance (53.9%). Less than one-third of the participants had a physical exam in the past year (31.4%). Less than 10% of the participants utilized an emergency room in the past year (8.8%). Sixty-six percent of all participants preferred to see a female physician (72% for Muslim participants, 44.8% for non-Muslim participants—not shown in the table). Slightly over half of all participants (52%) preferred a physician from the same culture (60.2% for Muslim participants, 31% for non-Muslim participants—not shown in the table). Approximately half of

Table 1.

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS AND DESCRIPTIVE STATISTICS

	Frequency (%)
Language (for the survey)	
English	82 (80.4)
Arabic	20 (19.6)
High school or higher	27 (26.5)
Married	68 (66.7)
Work full-time	39 (38.2)
Was in a refugee camp	61 (59.8)
Reason moved out from a home country (multiple answers)	
War	71 (69.6)
Political conflicts	18 (17.6)
Discrimination against your ethnic group	10 (9.8)
Religious conflicts	9 (8.8)
Natural disasters	7 (6.9)
Ethnicity	
Somali	42 (41.2)
Sudanese	24 (23.5)
Iraqi	16 (15.7)
Syrian	5 (4.9)
Other	15 (14.7)
Religion—Islam	73 (71.6)
Housing	
Renting	85 (83.3)
Owning	6 (5.5)
Car owner (respondent or family)	78 (76.5)
Health insurance	
No health insurance	14 (13.7)
Medicaid	51 (50.0)
Employment-based insurance	11 (10.8)
Affordable Care Act insurance	8 (7.8)
Medicare	3 (2.9)
Other/ not specified insurance	15 (14.7)
Dental insurance	55 (53.9)
Had a physical exam in the past year	32 (31.4)
Used ER in the past year	9 (8.8)
Prefer a female physician	66 (64.7)
Prefer physician from the same cultural background	53 (52.0)
Had a mammography in the past two years	28 (27.5)
Had a Pap smear in the past three years	18 (17.6)

(continued on p. 342)

Table 1. (*continued*)

	Frequency (%)
Self-reported general health	
Excellent	23 (22.5)
Very good	39 (38.2)
Good	16 (15.7)
Fair	13 (12.7)
Poor	6 (5.9)
Mean (SD)	
Age	42.01 (17.78)
Years in the US	7.86 (4.32)
Depression (PHQ-9)[a]	4.04 (5.95)
Physical functioning[b]	67.09 (41.56)

N = 102
Notes:
[a]Higher scores indicate higher levels of depression.
[b]Higher scores indicate better physical functioning.

participants (48%) preferred a physician who is a woman from the same culture (not shown in the table). Slightly less than 30% of the participants had a mammogram in the past two years. Among the participants aged 40 or older (n=40), the mammogram rate was 47.5% (not shown in the table). Less than 20% of the participants had a Pap smear in the past three years (17.6%). Approximately 40% of the participants consider their general health to be good. The average PHQ-9 score (for depression) was 4.04 (SD=5.96) which suggests overall low levels of depression. The average physical functioning score was 67.09 (SD=41.56).

Table 2 presents the results of the regression analysis. Full-time employment ($p<.05$), better self-reported general health ($p<.01$), and having had a physical exam in the past year ($p<.01$) were associated with higher levels of depression. Having resided in a refugee camp ($p<.01$) was associated with lower levels of depression. Being married was associated with better physical functioning ($p<.05$). Older age and having had a physical exam in the past year were associated with lower levels of physical functioning ($p<.01$).

Discussion

This study examined health and well-being of women migrating from predominantly Muslim countries to the U.S. using a set of valid and reliable measures. There are three main findings. First, there were several women's health-related issues: low rates for mammography exams and Pap smears and preference for female physicians and/or physicians from the same culture. Second, while only a third of the participants had a physical exam in the past year, having had a physical examination was related to higher levels of depression and worse physical functioning. Third, the participants who were not in a refugee camp reported higher levels of depression than those who were not.

Table 2.

PREDICTORS OF DEPRESSION AND PHYSICAL FUNCTIONING[a]

	Depression (PHQ-9) β	p-value	β	Physical function p-value
Age	0.02	N.S.	–0.89	< .01
Less than high school	0.70	N.S.	–16.48	N.S.
Full time employment	2.54	< .05	–3.54	N.S.
Was in a refugee camp	–3.97	< .01	–0.77	N.S.
Muslim	–0.73	N.S.	11.72	N.S.
Married	–0.55	N.S.	21.15	< .05
General health	2.25	< .01	–2.05	N.S.
Physical exam in the past year	7.17	< .01	–60.22	< .01
Prefer physicians in the same culture	1.71	N.S.	–11.76	N.S.
(Constant)	–2.59	N.S.	130.16	< .01
R^2	0.73		0.82	
F	13.45		25.95	
p-value	< .01		< .01	

Notes:
[a]Multivariate multiple regression. p-value denotes significance from multivariate regression analysis. N.S.= Not Significant.

The first main findings are related to women's health: low rates for mammography exams and Pap smears and preference for female physicians and/or physicians from the same culture. The rates for mammography (47.5% among those aged 40 or over) and a Pap smear (17.6%) among the participants of this study were much lower than those of the national average (66.8% in 2013 for mammography among women aged 40 or over; 69.4% in 2013 for a Pap smear).[22,23] Previous studies reported low rates of mammographies and Pap smears among immigrant Muslim women in the U.S.: 52% of women obtained mammographies noted in Hasnain's study and 50% Pap smear attainment noted in Salman's study.[24,25] Factors contributing the low rates include not having a primary care provider, lack of perceived importance of mammography, barriers, and lack of intention to be screened,[24] religious and cultural beliefs, financial concerns, and feeling embarrassed.[25] The rate of the uninsured among the participants (13.7%) was very similar to that among the national statistics among adults (12.8% in 2015).[26] Thus, whether having health insurance or not does not explain the low rates of mammography use and Pap smear attainment. The participants of this study reported a higher mammography use but a lower Pap smear use when compared to uninsured women utilizing a free clinic in the same city (40.6% for a mammogram, 51.7% for a Pap smear).[27] While the rates for both mammography use and a Pap smear among the study population is low, the extreme low rates of a Pap smear needs to be further examined to increase the screening rate.

A connected finding was regarding the preference for female physicians and/or physicians from the same culture, especially among Muslim participants, is consistent with the results of previous studies with Muslim women which were mostly in obstetrics and gynecology (OB/GYN) settings.[11] Beyond OB/GYN, nearly 100% of Muslim women preferred a female physician for stomach problems according to an Australian study.[28] This same study found that slightly more than half of Muslim women preferred a Muslim physician for a physical exam.[28] In practice, a female physician from the same cultural background may not be always available in a timely manner. Both providers and patients experience challenges while providing care to Muslim women.[29] It is important to further enhance culturally competent care for this population so that female Muslim patients have a more comfortable health care experience, even when they do not see their preferred provider.

The second main finding was that having had a physical exam is related to higher levels of depression and worse physical functioning. This issue may be opposite to generally expected results. But, this study was cross-sectional and does not determine the time order among the variables. One of the potential explanations is that these women sought a physical exam because they already had poor health or waited too long to seek care. Patient education about preventive care would be needed so women from predominantly Muslim countries can access physical exams for prevention. Longitudinal studies are needed to determine timing in seeking physical health care among women from predominantly Muslim countries.

The third main finding was that the participants not in a refugee camp reported higher levels of depression than those who were not. This result may be related to eligibility criteria of refugee health services. Those women who were not legally defined as refugees do not have access to health care services for refugees or to resources provided by the refugee resettlement programs. This issue is true even if people are from the same countries and may have similar health and other issues as legally defined refugees.[30] A high percentage of their participants left a home country due to war and/or political conflicts. While poor environmental conditions that adversely affect health have been reported at refugee camps,[31] access to resources during the process of resettlement is important for mental health of women from predominantly Muslim countries, especially if they did not reside in a refugee camp and have limited access to refugee programs.

Likewise, full time employment and good physical health that are usually related to lower levels of depression,[32] were related to higher levels of depression among the participants of this study. The results indicate that findings on depression and predictors among general populations may not apply to refugee populations. The process of resettlement is very complex.[33] Factors that commonly affect better mental health may have reverse impacts on the mental health of refugees. Some refugee women coming from the Middle East and North Africa may feel vulnerable and unhappy having to work outside the home. With some of the more conservative refugees, a woman working outside the home is frowned upon and makes the husband look bad in the sight of others. For this reason, women may become depressed and resigned even though they have full time employment. For more educated female refugees who may have had a professional job such as a physician, lawyer, or teacher, most likely will not be able to

find a similar job due to language, need, and credentialing requirements. Low-wage, low-status jobs may be the only employment opportunities and it is likely that there can be depression associated with this subgroup. Future studies should further examine the mechanisms of depression among refugees.

While this project studies an under-studied population and has important contributions to practice and research, there are limitations. First, the sample size was small and not large enough to divide the participants into sub-groups for further analysis (e.g., Muslims vs. non-Muslims, Africans vs. Middle Easterners). The city where the data were collected does not have a large Muslim community. The country where the surveys were conducted had 4.4% Muslim adherent rate in 2010.[34] Not all of the Muslims are immigrants or refugees. Second, women from predominantly Muslim countries who are not literate in English or Arabic were not included. Third, the sample was one of convenience and may not necessarily represent the true variety of women from predominantly Muslim countries living in this U.S. city.

Conclusions. Cultural competence in health care has been considered very important.[35] Women from predominantly Muslim countries, especially if they are Muslim, have strong preference for female physicians and/or physicians from the same countries. It is necessary to develop educational programs for patients and providers who focus on these populations. In addition, culturally competent health education programs that promote preventive health care including screenings of breast cancer and cervical cancer should be provided and targeted to women from predominantly Muslim countries. Finally, regardless of having legal refugee status or not, the accessibility to services and resources needs to be ensured for immigrant populations who are from countries that suffer from various conflicts and social problems regardless of their official refugee status.

This study contributes to increasing knowledge about immigrant women from predominantly Muslim countries which is useful to improve health and well-being of this population. Immigrant women are especially vulnerable if they are from the countries involved in conflicts. Women from predominantly Muslim countries often experience additional challenges in health care. Future research and practice, especially focusing on strategies to provide effective health promotion programs and to enhance culturally competent care to better serve women from predominantly Muslim countries, should be developed.

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Conflict of interest

No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of article.

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