Published in final edited form as:

J Immigr Minor Health. 2015 October ; 17(5): 1305–1312. doi:10.1007/s10903-014-0119-3.

FACTORS ASSOCIATED WITH HEALTHCARE UTILIZATION AMONG ARAB IMMIGRANTS AND REFUGEES

Abstract

Background—Arab migrants are exposed to pre- and post migration stressors that increase their risk for health problems. However, little is known regarding healthcare utilization rates or factors associated with healthcare utilization among Arab immigrants and refugees.

Methods—590 participants were interviewed 1 year post-migration to the United States. Factors associated with healthcare utilization including stress coping mechanisms were examined using binary logistic regressions.

Results—Compared to national healthcare utilization data, immigrants had significantly lower and refugees had significantly higher rates. Being a refugee, married, and having health insurance were significantly associated with medical service utilization. None of the immigrants in this study had utilized psychological services. Among refugees, the use of medications and having strategies for dealing with stress were inversely associated with utilization of psychological services.

Discussion (Conclusion)—Healthcare utilization was significantly higher among refugees, who also reported a greater need for services than immigrants.

Keywords

Immigrants; refugees; healthcare; stress

Background

The U.S. Citizenship and Immigration Services (USCIS) defines immigrants as “*An alien admitted to the United States as a lawful permanent resident*”. It defines a refugee as “*Any person who is outside his or her country of nationality who is unable or unwilling to return to that country because of persecution or a well-founded fear of persecution*”. Migrants (immigrants and refugees) are considered vulnerable populations at increased risk for physical (1) and psychological (2) health problems. Due to the unrest in the Middle East, Arab migrants are exposed to pre and post migration stressors (3). Pre-migration stressors include exposure to prolonged war and political conflict, while language and cultural barriers are examples of post migration stressors (4). Research indicates that Arab migrants’ have high rates of poor self-rated health (ref 5). To date, however, there is a lack of studies examining the extent to which Arab migrants in the U.S. utilize medical and psychological services and factors associated with that utilization. (5).

Healthcare Utilization

Recent research shows that rates of healthcare utilization among refugees in the U.S. are higher than that of the general population, yet health disparities exist between the two groups (6). Language barriers, lack of insurance and problems with transportation are

identified as reasons for these disparities. Limited English proficiency not only affects migrants' access to healthcare, but also affects the quality of healthcare provided (7). In 2000, a study comparing healthcare utilization among refugees, immigrants and the general Canadian population reported that refugees utilized services more than immigrants; however, their rates of utilization were still less than the general population (8). It is unknown whether these results depend on the characteristics of the migrants, the new home countries or the healthcare systems. These studies were either not performed in the U.S, or did not include Arab migrants. Therefore the first aim of this study was to compare rates of healthcare utilization of Arab migrants one year post migration to that of the general U.S. population.

The USCIS reports that approximately 85,000 Iraqi refugees entered the U.S. from 2007 – 2013 (USCIS, 2013). Michigan is home to roughly 95,000 Arab migrants; including immigrants and refugees. Previous research shows differences in healthcare utilization among refugees and immigrants (8). Therefore the second aim of this project is to compare rates of healthcare utilization among Arab refugees and immigrants in Michigan one year post migration. The third aim is to identify factors associated with their healthcare utilization.

Stress, Coping, and Healthcare Utilization

Stress is known to cause or worsen many medical conditions, leading to increased healthcare utilization (9). One study comparing Mexican immigrants to non-Hispanic non-immigrant whites showed that immigrants were more likely to use positive reframing and religion to combat stress (10). Stress coping mechanisms are modifiable and are potential tools for healthcare providers to help migrants decrease their need for healthcare services. Therefore, the fourth aim of this study was to identify specific stress coping skills that are associated with psychological healthcare utilization among our study population.

Conceptual framework

It was hypothesized that both pre and post migration stressors would negatively impact health of Arab migrants leading to higher rates of healthcare utilization. Using the framework proposed by Peisker and Tilbury (11) where two means of coping with stress; passive and active were identified, we hypothesized that those reporting active stress coping styles would have lower healthcare utilization rates.

Methods

Participants

This longitudinal cohort study was conducted in the Detroit metropolitan area. Recruitment of participants was conducted between October 2010 and August 2011. Recruitment criteria included being at least 18 years of age and having verifiable refugee or immigrant status, and having recently arrived (less than 2 years) to the United States. Iraqi refugees were recruited via several local resettlement agencies, including Lutheran Social Services of Michigan, Kurdish Human Rights Watch, Catholic Services of Macomb, U.S. Commission

on Resettlement and Immigration, and the Arab Community Center for Economic and Social Services.

Non-Iraqi, non-refugee immigrants were recruited via many of the same community organizations, as well as via local religious organizations, community centers, schools, language centers, local factories, radio announcements, newspaper advertisements, and flyers. Approval for the study was obtained from the Institutional Review Board at Wayne State University, Detroit, Michigan.

Data Collection

Data was collected by interviewing 590 participants (291 Iraqi refugees and 299 non-Iraqi Arab immigrants). In 2010, a baseline structured interview was conducted, followed by a one year follow up interview. The data used for this study was based on the one-year follow up interview in 2011 conducted in Arabic by trained bilingual research assistants. Participants were interviewed using a 227-item survey asking about demographic information, medical conditions, and daily experiences in the U.S. The baseline interview emphasized their previous experiences/difficulties in their countries of origin; the follow up interview, upon which this study is based on, emphasized their current experiences/difficulties in the U.S. The measures used in this study are further explained below.

Measures

Sociodemographic variables—Participants self reported their age, gender, marital status, current employment status and highest level of education.

Health insurance—Participants were asked whether they had health insurance at the time of the interview. This variable was dichotomized (yes/no), regardless of the type of insurance coverage.

Healthcare utilization—Participants were asked about their “*awareness, need and use*” of medical and psychological services with response alternatives “*Yes or No*” for each item. The national rate of healthcare utilization was obtained from 2011 data from the National Health Interview Survey, NHIS (12).

Medical conditions—Participants were asked about the absence or presence of 15 medical conditions with an extra question for “others” and were assigned a score of “0” or “1” for the absence or presence, respectively, of these conditions. The scores were summed giving each participant a Medical Condition Score (MCS) ranging from 0 to 16, where higher scores indicated a greater number of medical conditions.

Daily hassles—A modified version of the daily hassles scale (13) was used. Using a 5 degree Likert scale ranging from “*almost never*” to “*almost always*”, participants were asked about the frequency with which they experienced problems with various potential daily hassles, including transportation and language. Each participant was assigned a score from 1 to 5 where a higher score indicates more problems.

Stress coping—This scale was comprised of 9 items regarding various stress coping skills. The response alternatives were a 5-point Likert scale ranging from “*Strongly agree*” to “*Strongly disagree*.” An Example includes “*Talking with someone helps me manage stress*”. The responses were coded 1 through 5; some were reversed so that higher scores indicate more positive stress coping skills. Scores from all 9 questions were summed to obtain a Stress Coping Score (SCS). Individuals with higher scores had better stress coping skills. Reliability estimates (Cronbach’s alpha) for the SCS were calculated for the combined sample with an alpha of 0.70.

Analysis

Refugees and immigrants were compared on all demographic variables, MCS, SCS, reported problems with language and transportation, and utilization of healthcare services. Chi-square tests were utilized for all ordinal variables and Students t-tests for all continuous variables. A one sample z-test was used to compare the healthcare utilization study data to national values.

Binary logistic regression was used to assess factors associated with reported utilization of medical healthcare services. None of the immigrants reported utilization of psychological services; therefore a separate logistic regression was performed to determine factors associated with utilization of psychological services among refugees only. For both regressions the dependent variable was self-reported utilization of the corresponding service. Healthcare utilization was examined adjusting for potentially confounding sociodemographic factors, the MCS, problems with transportation and language, and the SCS. The variable health insurance was excluded from the model examining psychological healthcare utilization among refugees since all refugees reported having health insurance. In both regressions all variables were forced to enter the model in one block using the enter mode. Since refugees with higher levels of SCS had a significantly lower psychological services utilization rate, a third regression was conducted to assess which stress coping variables were associated with utilization of psychological services. Data were analyzed using the IBM SPSS statistical program (version 21). A significance level of 0.05 was used for all analyses.

Results

Background characteristics and all study variables are summarized and compared between refugees and immigrants in Table I. The groups did not differ with regard to gender, age, or employment status. All refugees reported having health insurance, compared to 58% of immigrants ($p<.01$). Compared to immigrants, a greater proportion of refugees had less than 12 years of education ($p<.01$) and were unmarried ($p<.01$). Refugees reported having significantly more problems with transportation and language, more medical conditions, and lower stress coping skills than immigrants.

The U.S. national rate of healthcare utilization in 2011 was 84.8%, while that of the combined study population was 71.6%. When compared to the national rate, immigrants (58.6%) had significantly lower utilization rates, while refugees (92.1%) had significantly higher utilization rates than that of the U.S. population for the same calendar year ($p < 0.001$).

for both). Utilization of medical services differed significantly between refugees and immigrants ($p < 0.001$).

Table II illustrates the results of the Chi-square tests comparing refugees' and immigrants' awareness, need, use and perceived helpfulness of medical and psychological healthcare services. All refugees reported needing medical services; approximately 92% actually utilized them and 89% found them to be helpful. Approximately 30% of immigrants were aware of psychological services offered, with only 2% reporting a need for them, and none utilized them. These results are significantly lower than those reported by refugees. Among refugees, 50% were aware of psychological services, approximately 12% needed them approximately 9% utilized them and 8% considered them helpful.

Table III (3) illustrates the results of the binary logistic regression examining utilization of medical services among the combined sample. The final model was significant ($p < 0.001$) and explained approximately 51% of the variance in utilization (Nagelkerke $R^2 = 0.51$). Being a refugee, having health insurance, and experiencing more problems with transportation were significant factors associated with utilization of medical services.

Table IV (4) illustrates the results of the binary logistic regression examining utilization of psychological services among refugees. The final model was significant ($p < 0.001$) and explained approximately 58% of the variance in utilization (Nagelkerke $R^2 = 0.580$). Higher MCS and lower SCS scores were significantly associated with utilization of psychological services among refugees.

Since refugees with higher levels of SCS had a significantly lower psychological services utilization rate, a third logistic regression was performed to identify specific stress coping skills that might better explain these results. Table V (5) illustrates the results of the binary logistic regression examining utilization of psychological services among refugees with individual stress coping skills as the predicting variables. The final model was significant ($p < 0.001$) and explained approximately 70% of the overall variance (Nagelkerke $R^2 = 0.702$). Having effective strategies to deal with stress and reporting using medications to deal with stress were significant predictors of lower utilization rates of psychological services. The amount of missing data ranged from 1% – 3% for all analyses.

Discussion

In our study population, the rate of utilization of medical services among refugees was significantly higher than that of the U.S. population which agrees with the results of a study among refugees in Canada by Kiss and colleagues (6). It is worth noting that the home countries of refugees in the above mentioned study differ from that of this study. It is interesting that our results were similar, despite the differences between the U.S. and Canadian healthcare systems. The Center for Disease Control (CDC)'s Division of Global Migration and Quarantine mandates refugees to undergo a medical examination within one year of arrival (CDC, 2013), which is a likely explanation for these findings in this study. The NHIS survey asked about any kind of medical services that potentially could have included visits for psychological issues. If that is the case, the national rates for medical

healthcare services might be lower. This would enhance the difference between the national and refugee rates; it is unknown how this would have affected the difference between the national rate and the rates for immigrants. Despite that, the researchers do not believe that this is an issue, since the same would apply to the study participants. They were specifically asked about seeking psychological attention, which does not change the fact that they could have sought medical attention for psychological issues. Stigma seeking care for psychological issues could have also played a role (14). Among our study population, refugees had significantly more medical conditions than immigrants. This finding can explain the significant difference between immigrants and refugees in utilization of psychological services, with somatization of psychological symptoms as a potential possibility (15).

Refugees utilized medical healthcare services significantly more than refugees; this is in contrast to a study conducted by Jamil and colleagues in 2009, where no statistically significant differences were found comparing healthcare utilization between a group of Iraqi refugees and Yemeni immigrants (16). This discrepancy might be due to the fact that the study performed by Jamil and colleagues excluded females, and research has shown that female refugees have higher healthcare utilization rates than males (17). The findings in the current study were likely explained by the fact that data collection for this study occurred during the refugees' first year of arrival where a physical exam is mandatory as noted above.

This study found a significant difference between refugees and immigrants in transportation and language problems, with refugees reporting more problems with both. Transportation problems are a potential proxy for unemployment (18), but unemployment rates were not significantly different between the 2 groups. Refugees having significantly more language difficulties than immigrants might be explained by their significantly lower levels of education.

Being a refugee, being married, having health insurance, and having more transportation problems were significant predictors of utilization of medical services among our study population. One would think that having more transportation problems would be inversely associated with utilization; therefore the relationship is not fully understood. Research has shown that transportation problems are usually "lumped" together, while they can be broken down into different aspects such as having a driver's license, owning a car, and having a family member or a friend to help driving, to name just a few (19). Our study did not ask about all these aspects, furthermore, participants were not asked whether these transportation problems were an obstacle to meeting their healthcare needs. A study performed by McMichael and Manderson (20) showed that refugees with established social networks were capable of accessing material support including healthcare services. So it could be that although they had more transportations problems, they were able to overcome them thanks to a good social network. It is worth noting that having language problems was not a significant predictor of decreased healthcare utilization. The study was performed in Michigan where Arabic speaking physicians are readily available, which might not be the case in other states. Thus, caution should be used when generalizing this finding.

Among refugees, having a higher MCS was significantly associated with utilization of psychological services. This is in agreement with the results of a study performed in Canada where the number of somatic symptoms was significantly associated with healthcare utilization for mental health disorders (17). Somatization among patients is well documented in the literature (21) and significantly increases the use of mental health services (22). As mentioned previously, stigma might have been a barrier to utilization as well (14), especially among Arab migrants (23).

Refugees reporting higher levels of SCS had significantly lower rates of utilization of psychological services. Previous research reported similar results among both refugees (24) and immigrants (10). Peisker and Tilbury (11) identified two means of coping with stress; passive and active. They reported that refugees who adopt active stress coping styles adapt better socially and emotionally when compared to those who adopt passive coping styles. As hypothesized, refugees with a specific strategy to deal with stress (an active coping style) had lower psychological healthcare utilization rates. The fact that refugees taking medications utilize psychological healthcare less than those who do not, is a controversial finding. The data regarding the type of medication is unavailable. Furthermore, data regarding undergoing therapy or solely depending on medications is unavailable. Nevertheless, the study identified that using active stress coping skills such as having a strategy to recover from stress can be effective in relieving stress and consequently improve the quality of utilization of psychological services by refugees. This information can be utilized by organizations providing social support to refugees by formulating a list of potential problems commonly confronted by refugees (ex. unemployment and language problems) with information about resources and methods to overcome these problems.

New Contribution to the Literature

This study identified factors associated with utilization of healthcare services among Arab migrants to the U.S. Healthcare utilization was significantly higher among refugees, who also reported a greater need for services than immigrants. Being a refugee and having health insurance were the strongest determinants of utilization of medical services. Good stress coping skills were associated with lower utilization of psychological services among refugees.

Limitations and Strengths

Despite the large number of study participants, generalizing the results should be done with caution. Their settlement in metro Detroit as their new home with a large Arab American population could be considered an asset that assisted them both socially and psychologically. This might not be an available asset to migrants from other backgrounds. Selection and non-response biases are a potential limitation to the study; it is unknown whether those who chose not to participate in the study would have changed the results of the study. One of the strengths of the study is the low rate of missing data.

Acknowledgments

This study was funded by a grant from the National Institute of Mental Health (NIMH, grant R01MH085793) and it represents the views of the authors and does not necessarily reflect the views of the NIMH.

References

1. Jamil H, Hakim-Larson J, Farrag M, Kafaji T, Duqum I, Jamil LH. A retrospective study of Arab American mental health clients: Trauma and the Iraqi refugees. *American Journal of Orthopsychiatry*. 2002; 72(3):355–61. [PubMed: 15792047]
2. Arnetz B, Ventimiglia M, Makki H, Mahmoud R, Jamil H. PW01-120-Mental health, treatment response and utilization among Iraqi refugees as compared to non-war exposed Arab immigrants. *European Psychiatry*. 2010; 25:1536.
3. Jamil H, Farrag M, Hakim-Larson J, Kafaji T, Abdulkhaleq H, Hammad A. Mental health symptoms in Iraqi refugees: posttraumatic stress disorder, anxiety, and depression. *Journal of cultural diversity*. 2007 Spring;14(1):19–25. [PubMed: 19172969]
4. Lawrence J, Kearns R. Exploring the ‘fit’ between people and providers: refugee health needs and health care services in Mt Roskill, Auckland, New Zealand. *Health & social care in the community*. 2005 Sep; 13(5):451–61. [PubMed: 16048533]
5. Read JG, Amick B, Donato KM. Arab immigrants: a new case for ethnicity and health? *Social science & medicine*. 2005 Jul; 61(1):77–82. [PubMed: 15847963]
6. Kiss V, Pim C, Hemmelgarn BR, Quan H. Building Knowledge about Health Services Utilization by Refugees. *Journal of Immigrant and Minority Health*. 2013; 15(1):57–67. [PubMed: 21959711]
7. Derose KP, Escarce JJ, Lurie N. Immigrants and health care: sources of vulnerability. *Health affairs*. 2007 Sep-Oct;26(5):1258–68. [PubMed: 17848435]
8. Kliewer EV, Citizenship C, Canada I, Assessment BCOoHT, Kazanjian A. The health status and medical services utilization of recent immigrants to Manitoba and British Columbia: a pilot study: BC Office of Health Technology Assessment. 2000
9. Gidron Y, Duncan E, Lazar A, Biderman A, Tandeter H, Shvartzman P. Effects of guided written disclosure of stressful experiences on clinic visits and symptoms in frequent clinic attenders. *Family Practice*. 2002; 19(2):161–6. [PubMed: 11906981]
10. Farley T, Galves A, Dickinson LM, Perez MdJD. Stress, coping, and health: a comparison of Mexican immigrants, Mexican-Americans, and non-Hispanic whites. *Journal of immigrant health*. 2005; 7(3):213–20. [PubMed: 15900422]
11. Peisker VC, Tilbury F. “Active” and “passive” resettlement: The influence of support services and refugees’ own resources on resettlement style. *International Migration*. 2003; 41(5):61–91.
12. Schiller JS, Lucas JW, Ward BW, Peregoy JA. Summary health statistics for U.S. adults: National Health Interview Survey, 2010. *Vital and health statistics Series 10, Data from the National Health Survey*. 2012 Jan.(252):1–207.
13. Kanner AD, Coyne JC, Schaefer C, Lazarus RS. Comparison of two modes of stress measurement: daily hassles and uplifts versus major life events. *Journal of behavioral medicine*. 1981 Mar; 4(1): 1–39. [PubMed: 7288876]
14. Eisenberg D, Downs MF, Golberstein E, Zivin K. Stigma and help seeking for mental health among college students. *Medical care research and review : MCRR*. 2009 Oct; 66(5):522–41. [PubMed: 19454625]
15. Aragona M, Catino E, Pucci D, Carrer S, Colosimo F, Lafuente M, et al. The relationship between somatization and posttraumatic symptoms among immigrants receiving primary care services*. *Journal of traumatic stress*. 2010; 23(5):615–22. [PubMed: 20931663]
16. Jamil H, Ventimiglia M, Mahmoud R, Arnetz B. Somatic and psychiatric disorders and health care utilization among Iraqi refugees and Yemeni immigrants. *New Iraq J Med*. 2009; 5:14–22.
17. Fenta H, Hyman I, Noh S. Health service utilization by Ethiopian immigrants and refugees in Toronto. *Journal of Immigrant and Minority Health*. 2007; 9(4):349–57. [PubMed: 17380388]

18. Thakuriah Vonu P, Persky J, Soot S, Sriraj PS. Costs and benefits of employment transportation for low-wage workers: an assessment of job access public transportation services. *Evaluation and program planning*. 2013 Apr;37:31–42. [PubMed: 23352892]
19. Arcury TA, Preisser JS, Gesler WM, Powers JM. Access to transportation and health care utilization in a rural region. *The Journal of Rural Health*. 2005; 21(1):31–8. [PubMed: 15667007]
20. McMichael C, Manderson L. Somali women and well-being: Social networks and social capital among immigrant women in Australia. *Human Organization*. 2004; 63(1):88–99.
21. Simon G. Psychiatric disorder and functional somatic symptoms as predictors of health care use. *Psychiatric Medicine*. 1992; 10(3):49. [PubMed: 1410545]
22. Barsky AJ, Orav EJ, Bates DW. Distinctive patterns of medical care utilization in patients who somatize. *Medical care*. 2006; 44(9):803–11. [PubMed: 16932131]
23. Erickson CD, al-Timimi NR. Providing mental health services to Arab Americans: recommendations and considerations. *Cultural diversity & ethnic minority psychology*. 2001 Nov; 7(4):308–27. [PubMed: 11759269]
24. Khawaja NG, White KM, Schweitzer R, Greenslade J. Difficulties and coping strategies of Sudanese refugees: A qualitative approach. *Transcultural psychiatry*. 2008; 45(3):489–512. [PubMed: 18799645]

Table 1

Characteristics of questionnaire respondents, immigrants vs. refugees.

Variable	Immigrants n = 299		Refugees n = 291	
	n°	%	n°	%
Gender	Male	57.5	158	54.3
	Female	42.5	133	45.7
Health insurance**	Yes	58.2	287	100
	No	41.8	0	0
Education**	12Y	53.2	202	69.4
	> 12 Y	46.8	89	30.6
Employment status	Employed	55.2	144	49.5
	Unemployed	44.8	147	50.5
Marital status**	Married	71.6	155	53.3
	Single, divorced,	28.4	136	46.7
Age in years	Mean	33.86	Mean	34.30
	SD	11.58	SD	11.37
Problems with transportation (scale 1–5)*	2.36	1.16	2.54	1.10
Problems with language (scale 1–5)**	3.06	0.90	3.52	0.80
Medical Condition Score (MCS) (scale 0–16)**	0.51	0.90	1.54	1.97
Stress Coping Score (SCS) (scale 9–45)**	35.78	4.15	34.29	2.63

Missing data for health insurance (n=7 immigrants and n=4 refugees) and education (n=2 immigrants).

* p < 0.05

** p < 0.001

SD: Standard deviation

Table II

Healthcare services, immigrants vs. refugees

Variable	Immigrants n = 299		Refugees n = 291			
	n	%	n	%		
Medical healthcare services	Aware	Yes	290	98.6	291	100
		No	4	1.4	0	0
	Need*	Yes	272	92.5	291	100
		No	22	7.5	0	0
	Use*	Yes	170	58.6	268	92.1
		No	120	41.4	23	7.9
Psychological healthcare services	Helpful	Yes	158	85.4	259	89
		No	27	14.6	32	11
	Aware*	Yes	96	32.8	146	50.2
		No	197	67.2	145	49.8
	Need*	Yes	5	1.7	36	12.4
		No	287	98.3	255	87.6
	Use*	Yes	0	0	25	8.6
	No	292	100	266	91.4	
	Helpful	Yes	0	0	20	6.9
	No	45	100	271	93.1	

* p < 0.001

Table III

Factors associated with utilization of medical services in the combined sample (n=590).

Variable	β	OR	95 % CI
Migrant status ** (ref. immigrant)	1.19	3.28	1.62 – 6.62
Gender (ref. male)	0.426	1.53	0.80 – 2.91
Age	–0.01	0.99	0.96 – 1.02
Health insurance *** (ref. no insurance)	2.62	13.70	7.23 – 25.93
Education (ref. high school)	–0.28	0.76	0.43 – 1.34
Employment (ref. unemployed)	–0.42	0.66	0.34 – 1.27
Marital status * (ref. unmarried)	0.69	1.99	1.02 – 3.90
Transportation problems **	0.49	1.64	1.22 – 2.21
Language problems	–0.19	0.83	0.58 – 1.20
MCS	0.15	1.16	0.91 – 1.49
SCS	0.06	1.06	0.98 – 1.15

MCS: Medical Condition Score

SCS: Stress Coping Score

*
p < 0.05**
p < 0.01***
p < 0.001

Table IV

Factors associated with utilization of psychological healthcare services among refugees (n = 291).

Variable	β	OR	95 % CI
Gender (ref. male)	0.89	2.45	0.65 – 9.25
Age	0.02	1.03	0.96 – 1.10
Education (ref. at least HS education)	–0.09	0.92	0.17 – 4.94
Employment (ref. unemployed)	–1.97	0.14	0.02 – 1.28
Marital status (ref. other than married)	–0.12	0.89	0.24 – 3.32
Transportation problems	0.07	1.07	0.59 – 1.96
Language problems	0.26	1.30	0.51 – 3.27
MCS*	0.39	1.48	1.08 – 2.02
SCS***	–0.62	0.54	0.40 – 0.72

MCS: Medical condition score

SCS: Stress Coping Scale

HS: High school

*
p < 0.05**
p < 0.01***
p < 0.001

Table V

Stress coping factors associated with utilization of psychological health care services among refugees.

Question	β	OR	95% CI
I have effective strategies that help me recover from stress *	-1.31	0.27	0.08 – 0.86
Talking with someone helps me manage stress	-0.23	0.80	0.24 – 2.67
I use medications to deal with stress **	-1.81	0.16	0.08 – 0.33
Spending time with friends and/or family helps me to recover from every day stress	0.52	1.69	0.39 – 7.26
I manage stress by expressing how I feel	0.18	1.20	0.38 – 3.79
When I experience stress, I try to solve the problem that is causing it	-1.80	0.17	0.03 – 1.11
I deal with stress by trying not to think about it	0.71	2.02	0.71 – 5.78
My religious/spiritual beliefs help me to manage every day stress	-0.42	0.66	0.15 – 2.97
Engaging in pleasant/fun activities help me recover from stress	-0.39	0.68	0.27 – 1.69

*
p < 0.05

**
p < 0.001

OR: Odds ratio

CI: Confidence interval