Assessing Mental Health Needs and Disparities Among Syrian Refugees Resettled in Michigan

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Syrian refugees face increased risk for symptoms of anxiety, depression, and post-traumatic stress disorder. This study aims to investigate the prevalence of psychological disorders symptoms among Syrian refugees resettled in Michigan, the extent of their utilization of mental health care services, their interest in seeking professional assistance, and the factors influencing their help-seeking behavior. Michigan is a state with a significant Arab-American population, providing a unique context to explore mental health needs and barriers to service utilization.

Sixty-three participants were recruited using the database of a non-profit organization and a snowball sampling method. The main study outcome was the prevalence of possible mental health disorders. The Harvard Trauma Questionnaire and the Hopkins Symptoms Checklist-25 were used to screen for symptoms of depression, anxiety, and post-traumatic stress disorder. A questionnaire assessed the utilization of mental health care services, the interest in seeking professional assistance, and the barriers hindering Syrian refugees' access to mental health services. We examined the association between experiencing mental health disorder symptoms and help-seeking behaviors and the association between interest in seeking professional assistance and being symptomatic. The prevalence of mental health disorder symptoms was summarized using frequencies, percentages, and mean values. A two-tailed Fisher's exact test assessed the correlation between variables. Sixty-five percent (65%) of the participants screened positive for at least one disorder, suggesting a high prevalence of possible mental health disorders among participants. Seventeen percent (17%) reported seeing a professional; however, 78% expressed interest in seeking professional assistance. Most reported barriers to accessing mental health, including lack of information, fear of judgment, and shame. There was a statistically significant correlation between their last year utilization of mental health care services and their interest in seeking professional assistance. Similarly, there was a statistically significant association between interest in seeking professional assistance and being symptomatic. Syrian refugees continue to experience mental health challenges 2–5

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years after resettlement. This population underutilizes mental health services due to several barriers. However, participants expressed their desire for these services in Michigan.

Keywords

refugees • resettlement • traumatic experiences • barriers • accessing mental health • Syrian refugees

Introduction

Since March 2011, the Syrian conflict has given rise to the largest humanitarian crisis in the modern era, with the crisis progressively intensifying due to inadequate services, resources, and assistance. This conflict has led to more than 14 million displaced individuals within Syria, and refugees dispersed globally (UNHCR, 2023). Syrian refugees sought refuge in more than 130 countries around the world, with the majority living in neighboring countries such as Jordan, Iraq, Turkey, and Lebanon (UNHCR, 2023). As the conflict unfolded, the escalating number of individuals impacted by it surpassed the capacity of neighboring countries and the international community to respond to their growing needs, creating a disparity between demand and available support (International Medical Corps, 2023, United Nations Office for Coordination of Humanitarian Affairs, 2023).

Over the last decade, researchers have investigated and documented short-term and long-term psychological and mental health impacts experienced by refugees and displaced individuals (Bogic et al., 2015; Hollifield et al., 2009; Steel et al., 2009). It is now established that the physical and psychological stressors refugees encounter in their country of origin, during the transition to host countries and throughout resettlement periods, place them at a heightened risk for emotional distress, mental disorders, and various adverse health outcomes (APA, 2016; Hollifield et al., 2009; Polcher & Calloway, 2016; Shawyer et al., 2017; Steel et al., 2009). Literature on refugees' mental health shows a high prevalence of multiple conditions, including depression, generalized anxiety, post-traumatic stress disorders, somatization, and substance abuse (Bogic et al., 2015; Hollifield et al., 2009; Sangalang et al., 2019; Taylor et al., 2014; Silove et al., 2017 Steel et al., 2009).

While many refugees show high resilience and ability to cope with severe stressors, some need supportive psychosocial services to navigate challenges and develop a healthy lifestyle (UNHCR, 2023). To promote mental health for refugees, the United Nations High Commisioner for Refugees (UNHCR) proposed integrating mental health services into medical services (UNHCR, 2023). However, studies consistently show refugees underutilize mental health services (Roberts et al., 2011 Sue et al., 2019; Weissbecker & Leichner, 2015).

Mental Health Services in the US

In the United States, various mental health services are available to support refugee populations, including community health clinics and specialized programs designed for trauma survivors. Initiatives backed by the Office of Refugee Resettlement (ORR) aim to provide targeted assistance through community-based programs to address the mental health needs of refugees. However, significant gaps remain in both accessibility and cultural competency. Despite the existence of these resources, many refugees face barriers that prevent them from fully utilizing

available services. A substantial number of refugees remain unaware of the mental health resources accessible to them, largely due to inadequate outreach efforts and lack of community education on mental health topics (Magwood et al., 2022). Research indicates that increasing awareness is crucial to improving service utilization. Language barriers often complicate communication between refugees and providers, which can diminish the effectiveness of care. Furthermore, there is a noticeable shortage of providers trained in cultural competency; many refugees report feeling misunderstood or alienated when their unique cultural backgrounds and lived experiences are not recognized in treatment. This disconnect can foster distrust and lead to premature disengagement from mental health care (Wong et al., 2016). Additionally, research highlights systemic issues within the US refugee resettlement framework that contribute to these challenges. Behavioral health assessments during domestic medical screenings are inconsistent (Afkhami & Gorentz, 2019).

The 2012 ORR Revised Medical Screening Protocol aims to address refugees' health needs by identifying acute and communicable illnesses while connecting them to ongoing care (CDC, 2014). Though it recommends behavioral health assessments, including screenings for depression and PTSD, these assessments are not mandatory, leading to inconsistent implementation (Afkhami & Gorentz, 2019). Moreover, funding for refugee-specific mental health initiatives remains insufficient, and many programs lack culturally and linguistically appropriate services. Stigma surrounding mental health care within refugee communities further exacerbates these challenges, often hindering refugees from seeking the assistance they need, even when they express a desire for psychological support (Wong et al., 2016). Without targeted interventions, such as increasing funding, training bilingual and bicultural providers, and implementing culturally sensitive approaches to care, the mental health challenges faced by refugee populations are likely to persist, leaving critical needs unaddressed. As such, it is imperative to address these gaps in care to ensure refugees receive the comprehensive mental health support they require for successful resettlement and long-term well-being (Magwood et al., 2022).

There is limited data regarding the mental well-being of recently arrived Syrians in the United States. Most studies on Syrian refugees' health status have been conducted in other resettlement countries (Armstrong-Mensah et al., 2023).). This scarcity can be attributed to the relatively low number of Syrian refugees who have resettled in the US (less than 0.5 percent of the global Syrian refugee population), and the fact that the arrival of Syrian refugees' only began in 2015, after going through extensive vetting processes (Javanbakht et al., 2018). Michigan ranked second to California, with more than 1,029 Syrian refugees resettled in Michigan since 2012, and the majority resettled in Southeast Michigan (migrationpolicy. org). State officials expect 2,583 more refugees arriving to Michigan in 2024, a 42% increase from the year before. Thirty-six percent of these refugees are expected to be of Syrian descent (UNHCR, 2022).

Mental Health Needs Among Syrian Refugees in Michigan

Syrian refugees in Michigan represent a vulnerable group whose mental health is impacted by cultural stigma and service barriers, making it essential to explore their help-seeking behaviors. A study in Detroit was conducted with 157 Syrian refugee adults during mandatory health screenings in primary care offices. The results indicated that 32% of the participants showed signs of possible post-traumatic stress disorder (PTSD), 40% exhibited possible anxiety, and 48% displayed possible depression (Javanbakht et al., 2018). A similar study was performed

among a convenience sample of 25 Syrian refugees in metropolitan Atlanta. The findings revealed higher rates than the Detroit metropolitan study, with 60% of the sample experiencing symptoms of anxiety, 44% reporting symptoms of depression, and 84% reporting symptoms of PTSD, with only 20% of the participants having received help from a mental health professional. The barriers reported included a lack of transportation and insufficient information (M'zah et al., 2019).

Michigan, home to one of the largest Arab American communities in the US, serves as a significant setting for examining the mental health needs of Syrian refugees. This population has endured extraordinary challenges, including the trauma of war and displacement, as well as the complexities of resettlement in a foreign cultural and linguistic environment. The stress of the Muslim travel ban, implemented shortly after the resettlement of many Syrian refugees, further exacerbated these difficulties, creating an atmosphere of uncertainty and fear about their status and future in the United States. The Syrian American Refugee Network (SARN), established by the Syrian diaspora community, has been instrumental in addressing these challenges by providing vital support and bridging critical gaps in the existing healthcare system. While SARN's efforts have alleviated some immediate stressors associated with resettlement, they have also underscored broader systemic issues, including persistent barriers to mental health care that Syrian refugees continue to encounter. The combination of SARN's resources and Michigan's established Arab American community creates a unique landscape for understanding how cultural, systemic, and social factors impact mental health outcomes and service utilization among refugees.

Despite the availability of mental health services in the US, including community-based clinics and trauma-focused programs, systemic barriers—such as cultural stigma, language obstacles, and a shortage of culturally tailored services—have significantly hindered their ability to access and effectively utilize these resources. The Michigan Syrian refugee community offers an important opportunity to study the intersection of these barriers and the effectiveness of diaspora-driven support initiatives, like SARN, in addressing them. Insights gained from this research can inform the development of culturally responsive and scalable mental health interventions tailored to the unique needs of this vulnerable population.

This study aims to assess the service needs among Syrian refugees in Michigan by examining the prevalence of psychological disorder symptoms, the help-seeking behaviors (past year use and future use intention), and the factors influencing the use of mental health services. Additionally, the research investigates the relationships between experiencing mental health disorder symptoms and help-seeking behaviors. By identifying these relationships, the study offers critical insights into the challenges faced by Syrian refugees in accessing mental health care, especially in the context of additional stressors such as the Muslim travel ban, and highlights opportunities to enhance culturally appropriate interventions.

Methods

Participants and Study Design

This study employed a cross-sectional survey with a qualitative open-ended item to achieve a better understanding of the relationship between mental health symptoms and help-seeking behavior among Syrian refugees in Michigan. The quantitative research methodology was chosen to objectively measure the prevalence of mental health symptoms and explore the

correlation between symptom severity and help-seeking behaviors. Using validated tools, such as the HSCL-25 and HTQ, provided reliable data to quantify these associations.

Ethical approval for this study was obtained from the Wayne State University Institutional Review Board (IRB). Potential participants were recruited from a non-profit organization that served Syrian refugees in Michigan and used a snowball sampling approach. Potential participants were contacted by phone from November 2019 to February 2020, and home visits were arranged to obtain consent and administer the assessment. Participants were provided with an information sheet emphasizing the voluntary nature of their participation and assuring anonymity. All communications, both verbal and written, were conducted in Arabic—the primary language of Syrian refugees.

The final study sample consisted of a convenience sample of 63 Syrian refugees, aged 18 or above, residing in Michigan at the time of the study, who fled the Syrian conflict after 2011.

Participants completed a survey and two questionnaire assessments, which took an average of 40–60 minutes, in semi-structured interviews facilitated by the investigator or the volunteer healthcare professional trained on the study aims and assessment process. At the end of the interview, each participant received a $20 gift card as compensation for taking the time to complete the assessment.

Measurements

The primary outcome of this study was the prevalence of mental health symptoms (depression, anxiety, PTSD) among participants. The secondary outcomes included help-seeking behaviors, in the context of the past "use of services in the past 12 months" and present "interest in receiving services or support," and barriers to accessing services.

Participants answered a survey of open-ended and closed-ended questions. The first part focused on collecting socio-demographic information. The second part consisted of the screening for mental health symptoms, questions about help-seeking behaviors, and barriers to accessing services.

Screening Tools

Participants completed two screening tools to assess symptoms of possible psychological disorders: the Hopkins Symptoms Checklist-25 (HSCL-25) and the Harvard Trauma Questionnaire (HTQ), part IV. These tools are the most frequently used assessments of depression and post-traumatic stress disorder (Bogic et al., 2015), and have been validated across groups of refugees with diverse linguistic and cultural backgrounds (Wind et al., 2017). These tools were selected for their demonstrated reliability, focus on Arabic-speaking populations, and alignment with the study's objective of understanding the mental health symptoms that influence help-seeking behavior.

HTQ

The HTQ was developed for refugees. Although the HTQ has four parts, Parts I, II, and III were not included in this study because they primarily provide detailed information about trauma experiences, and were therefore excluded to avoid re-traumatization or discomfort to the participants. The HTQ Part IV, developed at the Harvard Program in Refugee Trauma (HPRT) and the Indochinese Psychiatry Clinic (IPC) in Massachusetts, is a widely used

cross-cultural screening tool for evaluating traumatic events and PTSD among refugees (Darzi, 2017; Mollica et al., 1992). The Arabic version was adapted for Iraqi refugees in the US following cross-cultural instrument guidelines by two Iraqi psychiatrists and a translator. The Iraqi version was used due to cultural similarities between the Iraqi and Syrian populations.

HTQ questionnaire results were used to estimate the prevalence of post-traumatic stress disorder symptoms. The first 16 items were derived directly from DSM -5. Participants who scored 2.5 or higher were considered symptomatic.

HSCL-25

The HSCL-25 is a commonly employed inventory tool for evaluating symptoms related to anxiety and depression. The HSCL-25 Arabic-Iraqi refugee adaptation was used to determine the prevalence of depression and anxiety symptoms. Participants who scored above 1.75 were considered symptomatic (Mollica et al., 1987; Mollica et al., 2004).

Mental Health Disorders

HTQ and HSCL-25 results were combined to estimate the possible prevalence of any mental health disorder.

Mental Health Care Seeking Behavior

Last Year Mental Health Care Services Utilization

Participants were asked if they had seen a professional for mental health treatment or support in the last 12 months, with response options of "Yes" or "No."

Interest in Receiving Mental Health Support, Proxy of Perceived Mental Health Care Needs

Participants were also asked if they would be interested in seeing a professional for mental health support. For those who responded affirmatively, the degree of interest in seeing a professional was further assessed with the question, "If yes, how interested are you?" The response options for this question were: 1- Slightly, 2- Moderately, 3- A great deal, or 4- Extremely.

Barriers to Mental Health Support

To identify challenges and barriers to accessing mental health care services, participants responded to the following question: "In your opinion, what are the barriers for you and your community to seeking and receiving mental health support?"

Data Analysis

Quantitative Data

To assess the reliability of the HTQ-Part IV and HSCL-25, we employed the Cronbach alpha reliability coefficient test. The results indicated excellent internal consistency and reliability of

the tools, with the HTQ-Part IV (alpha = 0.94) and the HSCL-25 (alpha = 0.96). The prevalence of mental health disorder symptoms was summarized using frequencies, percentages, and mean values. A two-tailed Fisher's exact test assessed the correlation between variables, such as interest in receiving mental health support and utilized services among participants. Data analysis was conducted using the STATA software.

Qualitative Data

Responses to the question "In your opinion, what are the barriers for your community to seeking and/or receiving mental health support?" were analyzed using thematic coding. Codes were established based on the challenges and barriers identified in literature, such as stigma, lack of awareness, and language barriers (Gong-Guy et al, 1991; Weissbecker & Leichner, 2015). Frequencies and percentages were calculated for each theme to summarize the prevalence of specific challenges. After identifying the most frequent topics, the authors prepared a table with frequencies and percentages by topic.

Results

Socio-Demographic Characteristics

There were 63 participants who completed the survey and assessments. Of the participants, 76% reported living in Michigan for 3 years (n = 48). The mean age of the participants was 36 years (SD = 12.16), 52.38% were females (n = 33), and 47.62% were males (n = 30). Most of the participants (76%) were married (n = 48), and 12% of the participants reported being single (n = 12). Two were widowed and one was divorced. When asked about the highest degree obtained, the majority of the sample reported less than a high school diploma (n = 54, 86%). Two participants reported having a bachelor's degree, and three others reported completing some college. In terms of occupation, 26 (41.27%) self-reported as housewives, and 8 (12.70%) were full-time students.

Prevalence of Mental Health Disorders

Table 1 shows the possible prevalence of different mental health diagnoses based on HTQ and HSCL-25 responses. Over half of the participants (n = 41, 65%) score positive for symptoms of at least one disorder. Only 35% (n = 22) of the participants did not meet the criteria for being symptomatic on both instruments. Fifty-seven percent (n = 36) of participants met the criteria for symptoms of anxiety, and 58.73% (n = 37) met the criteria for symptoms of depression. Twenty-three percent (n = 15) met the criteria for symptoms of post-traumatic stress disorder based on HTQ response. When analyzed for all three disorders, 22% (n = 14) met the criteria for symptomatic anxiety, depression, and PTSD.

Seeking Behaviors

As shown in Table 2, only 11 (18%) participants reported seeing professional services in the last 12 months, while 31 participants (51.6%) indicated an interest in seeing a professional. Nine (15%) participants answered affirmatively for interest in receiving services and use of services.

Table 1. Prevalence of Possible Mental Health Diagnoses Among Syrian Refugees in Michigan Based on HTQ and HSCL-25 Criteria.

Mental Health Diagnosis	n	%
No mental health disorder	22	34.92
Any mental health disorder	41	65.08
At least anxiety	36	57.14
At least depression	37	58.73
At least PTSD	15	23.81
Anxiety only	3	4.76
Depression only	4	6.35
PTSD only	1	1.59
Anxiety and depression	19	30.16
PTSD, anxiety, depression	14	22.22

Note. Diagnosis is based on scoring criteria of the HSCL-25 and the HTQ.

Table 2. Association Between Interest in Mental Health Services and Actual Service Utilization Among Syrian Refugees: Chi-Square Analysis.

Seeking behaviors	Use of services past 12 months		*p*-value
Interest in services	Yes	No	
Yes	29.03 (n = 9)	70.97 (n = 22)	
No	6.90 (n = 2)	93.10 (n = 27)	
Total	18.33 (n = 11)	81.67 (n = 49)	0.043

Barriers to Mental Health Support

After coding the participants' responses to the open-ended questions, the most frequent categories were lack of information about services available (n = 13, 20%), fear of judgment by the community (n = 9, 14%), and shame (n = 8, 13%). Other challenges mentioned were a lack of interest in these services (n = 6, 10%) and language barriers (n = 5, 8%). For example, when identifying the barriers related to the lack of information, the participants answered:

> Participant 1: "I don't trust the therapist, the one I met didn't speak Arabic."
> Participant 2: "I am not aware these services are available."
> Participant 3: "I wish it was offered to us in the first year or first months, but no one offered us psychosocial services."
> Participant 4: "Language is the biggest barrier."

In terms of fear of judgment and shame, one participant responded, for example, "I don't want to be labeled as crazy," or, "I don't want people around me to judge me." Another male participant said, "the traditional community view of me will change if I go to therapy." Table 3 and Table 4 summarize the challenges to accessing mental health services identified by participants.

Table 3. Barriers to Mental Health Care Access Among Syrian Refugees in Michigan: Results from Qualitative Responses.

Challenges	n	%
Lack of information about services	13	20.6
Judgement of the community	9	14.29
Shame	8	12.70
Lack of interest	6	9.52
Language	5	7.93
Lack of experience in services	4	6.35
Lack of trust	2	3.17
Transportation	1	1.59
Finance	1	1.59
Lack of time	1	1.59
Culture	1	1.59
Fear	1	1.59
No answer	11	18.64
No challenges	8	12.70

Table 4. Qualitative Analysis of Barriers to Mental Health Services Among Syrian Refugees in Michigan: Themes and Frequencies.

Theme	Description	Frequency (n)	Percentage (%)
Lack of Information	Unawareness of available services	13	20%
Fear of Judgement	Community Stigma associated with seeking help	9	14.29%
Shame	Personal embarrassment or reluctant to seek help	8	12.70%
Language Barriers	Difficulty communicating in English	5	7.93%
Other Challenges	Transportation, cultural mismatch, etc.	10	15.87%

Association Between Variables

Bivariate associations indicated a considerable gap between the desire to see a therapist and the actual utilization of services. As shown in Table 5, a two-tailed Fisher's exact test indicated a statistically significant correlation between perceived need for mental health services and experiencing symptoms of mental health disorders, $p = 0.001$. For example, 78% of participants who indicated an interest in seeing a mental health professional also reported symptoms of anxiety. Similar results were found for experiencing depressive symptoms.

Table 5. Association Between Perceived Need for Mental Health Services and Mental Health Symptoms Among Syrian Refugees: Fisher's Exact Test Results.

Interest in Mental Health Services

	Interest 32 (52.46%)	No Interest 29 (47%)	p-value
All participants	32 (52%)	29 (47%)	0.001
No mental health disorder	4 (18%)	18 (81%)	0.001
Anxiety	25 (78.13%)	10 (34.48)	0.001
Depression	25 (78.13%)	10 (34.48%)	0.001
PTSD	11 (34.38%)	3 (10.34%)	0.034
Anxiety only	2(66.67%)	1 (33.33%)	0.001
Depression only	2 (66.67%)	1 (33.33%)	0.001
PTSD only	1(100%)	0	0.001
Anxiety and Depression	13 (68.42%)	6(31.58%)	0.001
Anxiety, Depression and PTSD	10 (76%)	3(23.08%)	0.001

Discussion

The goal of screening participants for mental health symptoms following 2–5 years of resettlement is to assess the prevalence of psychological disorders and prioritize mental health services for Syrian refugees residing in Michigan. The findings indicate alarming rates of potential mental health issues, with 65% of participants screening positive for at least one disorder, such as depression, anxiety, or PTSD. These rates underscore a significant level of psychological distress within the Syrian refugee community in Michigan. Moreover, only 18% of participants reported having accessed mental health services in the past year, indicating a notable gap in service utilization. This trend is consistent with broader research showing that available programs, such as community mental health centers, are often underused due to barriers including stigma, language barriers, and a lack of awareness regarding available resources.

To address these obstacles, increased outreach efforts, a greater number of bilingual providers, and culturally sensitive service delivery methods are essential. The gap between the expressed interest in mental health services and actual service utilization echoes findings from existing literature, which suggests that despite the availability of services, refugees frequently encounter barriers that hinder access, such as stigma and lack of information.

The most reported barrier identified in this study was a lack of awareness about the mental health services available, emphasizing the need for prioritized outreach and education initiatives that could significantly enhance service utilization among Syrian refugees. This study suggests that the challenges in accessing mental health services reported by participants align with previous research on refugees (DeSa, S et al, 2022)). The predominant barriers identified were a lack of knowledge and access to information about available mental health resources.

Additionally, issues related to shame and fear of judgment from community members were highlighted, along with language barriers and a general lack of trust. It is crucial for providers and researchers to comprehend and address the barriers that influence Syrian refugees' willingness

to seek help, both before and after engaging with mental health professionals. Tackling these challenges should contribute to the establishment of programs and services that genuinely cater to the needs of this population. While mental health screenings upon arrival in the US are standard, as recommended by the Centers for Disease Control and Prevention (CDC), the lack of follow-up psychological evaluations raises concern.

Many Syrian refugees appear unaware of the mental health services available to them, suggesting follow-up assessments were likely not conducted. This absence of information may stem from insufficient emphasis on mental health resources or the challenges posed by cultural and language barriers. The study also identified social stigma as a significant barrier, a recurring theme in the literature on refugee mental health (Bartolomei et al., 2016; Sue et al., 2019; UNHCR, 2015). The fear of being labeled as mentally unstable or weak, particularly among Syrian males, often inhibits individuals from seeking help. Mental illness may carry feelings of guilt, stemming from beliefs that it signifies a lack of faith in God or an inability to accept divine will. The study's findings illuminate a notable discrepancy between the expressed need for psychological support and the actual utilization of mental health services. This gap appears to result more from limited-service awareness than from the availability of quality services. Future research should focus on evaluating the quality and accessibility of these services to ensure they resonate with the specific needs of the refugee population.

The analysis also revealed a concerning trend of premature discontinuation of mental health services. Among those who sought professional help, many engaged in only a few sessions. This early termination may arise from perceptions of treatment being ineffective or culturally inappropriate. Discrepancies between refugees' expectations of treatment and the therapists' approaches may also play a role, as might the absence of bicultural and bilingual professionals skilled in understanding and connecting with the refugees' unique experiences. Interestingly, most participants who indicated no desire for professional help exhibited low scores on measures of depression, anxiety, and PTSD symptoms. In contrast, those with high symptom scores demonstrated a greater interest in seeking professional assistance. While the correlation between these variables ($p = 0.001$) is significant, it aligns with the expectation that individuals experiencing mental health issues are more likely to recognize their need for support.

Despite acknowledging barriers such as stigma, this group showed a willingness to seek help in coping with their mental health challenges. Further research is necessary to bridge the gap between perceived needs for mental health services and actual service utilization. Understanding how various challenges and barriers mediate the use of mental health services can inform the development of tailored interventions designed for those most likely to benefit.

To reconcile the disparity between the availability and utilization of mental health services, future studies should assess the accessibility and effectiveness of these services for refugees in the US. Attention should also be given to evaluating the quality and cultural appropriateness of existing mental health resources, ensuring they align with the unique needs of refugee populations.

In addition, it is vital to explore treatment-related factors, such as the duration of therapy, therapeutic approaches, and the cultural competencies of therapists. Investigating how these elements influence treatment outcomes and the likelihood of early termination can yield valuable insights. Future research should also delve into holistic approaches in addressing the mental health needs of Syrian refugees, as daily stressors and needs significantly impact their well-being. Such approaches should encompass factors like employment, acculturation, language proficiency, and overall health, as these elements are intricately linked to mental health disorders.

The current study identified social stigma as an additional obstacle, a recurring theme in refugee mental health literature (Bartolomei et al., 2016; Sue et al., 2019; UNHCR, 2015). Seeking mental health services or consulting professionals, such as psychiatrists, is linked to skepticism and fear of being stigmatized as mentally unstable or weak, particularly among Syrian males. Mental illness is further connected to feelings of guilt, often rooted in the prevailing belief that it signifies a lack of faith in God and an inability to accept divine will. The findings of this study reveal a substantial disparity between the expressed interest in consulting a professional and the actual reporting of such consultations. The significant gap observed between the desire to seek assistance and the lack of utilization of services implies that the failure to access services cannot solely be attributed to a lack of interest, stigma, or shame. The findings of this study also show the premature discontinuation of mental health services. Among those who reported consulting a professional, their participation was limited to just a few sessions. This phenomenon may be attributed to the perception of treatment as ineffective, unhelpful, or not culturally suitable. An additional factor for early termination could be the disparity between the refugees' expectations of treatment and the therapist's approach to assessment and intervention. Other contributing factors may include the absence of bicultural, bilingual professionals equipped with the skills to establish a connection and comprehend the intricacies of the refugees' experiences. They may lack cultural competency training to address the specific needs of this population effectively.

Most participants who expressed no interest in seeking professional help also scored low on measures of depression, anxiety, and PTSD symptoms. Participants who scored high in symptoms of anxiety, depression, and PTSD expressed a higher interest in seeing a professional. While the correlation between the two variables was significant, $p = 0.001$, it is not surprising, as individuals experiencing a mental disorder are more likely to express interest in mental health services. Furthermore, this correlation emphasizes that these participants had insight and awareness regarding their need for mental health care. Despite acknowledging the presence of barriers, such as fear of stigma, these individuals exhibited a willingness to seek help when coping with symptoms of mental disorders.

More research is needed to address the existing gap between perceived needs for service and the utilization of services. This nuanced understanding could facilitate the development of personalized interventions and services to enhance overall effectiveness. Examining how challenges and barriers mediate and impact the utilization of mental health services can also help tailor services for those most likely to benefit from them.

Furthermore, exploring treatment-related factors, such as the duration of treatment, theoretical approach, and the cultural competencies of therapists, is essential. Investigating how these factors influence treatment outcomes and early termination would be valuable.

Future research should also focus on the effectiveness of using holistic approaches with Syrian refugees because everyday needs and stressors, directly and indirectly, affect their mental health. Holistic approaches should address factors such as employment, acculturation, language skills, and general medical health, as they are all interlaced with mental health disorders.

Limitations of the Study

A word-of-mouth approach, a common strategy used with hard-to-reach populations, was used to recruit a convenience sample. This method poses a limitation on the generalizability of the study's outcomes. Another limitation is using self-report instruments to screen for mental health disorders rather than relying on clinical assessments. Despite the successful application of the HSCL-25 and HTQ instruments in cross-cultural refugee populations in the US,

self-report instruments can potentially inflate the prevalence of mental health disorders (Bogic et al., 2015). Self-reported assessments are susceptible to social desirability bias (Cohn et al., 2004), where participants may tend to respond in a socially acceptable manner, impacting the accuracy of the participants' responses. In Syrian culture, psychological disorders often carry negative labels and stigma, which might affect participants' reluctance and hesitancy to respond openly and honestly.

Conclusion

This study identified a high prevalence of mental health symptoms among Syrian refugees resettled in Michigan, coupled with a low rate of service utilization. These findings underscore the need for targeted interventions to raise awareness about available mental health resources and address barriers to accessing these services. The study identified a significant association between experiencing symptoms of mental health disorders and expressed interest in seeking mental health services. However, the low utilization of these services suggests that barriers and awareness must be addressed to bridge this gap.

Early detection and interventions are recommended to facilitate the healing process for Syrian refugees and help them develop coping skills to navigate their unique life demands and stress. Psychological support services and mental health interventions need to be holistic and comprehensive in their approach to addressing the multifactorial stressors and barriers this population deals with daily.

Future research should focus on evaluating the effectiveness of existing mental health programs for refugees in the US, particularly their accessibility and cultural relevance. Policy efforts should prioritize increasing funding for refugee-specific mental health services and training for providers to enhance cultural competency. More studies are needed on refining the definition of "mental health care needs" for refugee populations, evaluating the quality of available mental health services to ensure they align with these needs. Qualitative approaches may provide deeper insights into the barriers affecting help-seeking behaviors.

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Author Contributions

All authors contributed to the study conception and design. Material preparation and data collection were performed by Loubna Alkhayat. Data analyses were performed by Olga J. Santiago. The first draft of the manuscript was written by Loubna Alkhayat and Olga J. Santiago reviewed the manuscript. All authors reviewed, read and approved the final manuscript.

Ethics Approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Wayne State University Date: 9/29/2019/Protocol No. 1909002540.

Consent to Participate

Participants were provided with an information sheet in Arabic before starting the assessment. No personal identifying information was collected. All soft copies of de-identified anonymous data were stored in a locked computer.

Data

The data supporting the findings of this study can be available upon request from the principal investigator.

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