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Depression Screening and Education for Immigrants to Increase Access to Care

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Abstract

Problem: Immigrants are at risk for developing mental health disorders due to multiple factors including social, cultural, or economic factors. This can result in a lower quality of life and an increased chance of further disabilities. Although immigrants are at increased risk for the development of mental health disorders, studies show that utilization of available services and resources are low. Additionally, organizations that provide services to immigrants may not be implementing screening and psychoeducation.

Methods: This quality improvement (QI) project followed a descriptive, observational design along with an educational intervention. Using convenience sampling for recruitment, Russian and/or Ukrainian adults ages 18-65 years old who had received services through the partnering organization completed a Patient Health Questionnare-8 (PHQ-8) prior to an educational seminar. Four weeks after the educational seminar, participants completed a follow-up PHQ-8 and survey via email. Data collected included demographics, pre- and post-PHQ-8 results, and whether respondents sought out resources following the education.

Results: Five participants initially screened positive for depression via the PHQ-8. After implementation of the educational intervention, three out of five individuals scoring positive for depression sought out resources (42.9%) and showed a decrease in their PHQ-8 scores.

Implications for Practice: Implementation of screening and psychoeducation is recommended for organizations providing services for immigrant populations to potentially increase access and utilization of existing services.

Depression Screening and Education for Immigrants

Mental illnesses affect millions worldwide and carry great burden and anguish. Mental illness is not only a major public health concern, but also has an immense financial impact on individuals living with mental health issues as well as on the economy. The rates of mental illness have continued to grow, and the costs in turn continued to increase. In 2019, there were around 44.7 million immigrants living in the United States (Mohammadifirouzeh et al., 2023). Mental illness among immigrants can result in decreased quality of life, increased premature deaths, and more disabilities, which in turn leads to a negative impact on the economy and increased cost of services (Mohammadifirouzeh et al., 2023). Immigrants face many unique social, economic, and political challenges for them to succeed. Examples of these challenges include cost of services, language barriers, transportation concerns, cultural differences, and healthcare literacy problems (Ratnayake et al., 2022). These unique challenges further predispose immigrants to worsening mental health outcomes and create barriers to accessing appropriate services.

Although immigrants face distinct challenges and struggles which predispose them to mental health concerns, they utilize mental health services at a much lower rate (Mohammadifirouzeh et al., 2023). These challenges further increase their risk of facing a mental health concern (Ratnayake et al., 2022). Non-immigrants utilize services at a greater degree given the fact that they do not face challenges that immigrants face; they are generally more likely to know how to access services and have a regular source of care. Immigrants are less likely to have a regular source of care and are more likely to access care via an emergency department, urgent care, or walk-in clinic (Riviera et al.,

2020). The socioeconomic and cultural factors related to the challenges immigrants face result in a greater need for assistance and care.

Socioeconomic and cultural factors play an important role in the reasoning behind immigrants not accessing services and further act as disparities in utilization of services. Socioeconomic factors include education and income (Pandey et al., 2022). Cultural factors include stigma related to mental illness and cultural beliefs which impact their use of services (Pandey et al., 2022). Socioeconomic and cultural factors directly impact the risk of mental health concerns and act as barriers to accessing care.

In a program providing services for immigrants and their families within a Midwestern, urban community, a great opportunity existed to improve depression screening and education to increase utilization of mental health services. The framework used in this quality improvement project was the John Hopkins Nursing Evidence-Based Practice Model (JHNEBP). The purpose of this quality improvement (QI) project was to evaluate those in an immigrant population obtaining social services at a non-profit community organization in an urban, Midwestern setting who screen positive for depression, attend an educational session, and seek services if appropriate. The aim of this project was to increase the use of community mental health services by 10% within one month of attending an educational session among immigrants aged 18-65 years old**.** The primary outcome measure was the number of immigrants identified with depression via the PHQ-8. The secondary outcome measures were the number of immigrants who attend an educational session on depression and the number of immigrants who seek out resources following the education. The question for the study was: In Russian and/or

Ukrainian immigrants aged 18-65 years living in a Midwestern, urban community, what is the effect of depression screening and education on access to mental health services?

Literature Review

To conduct the literature search, CINAHL, PubMed, and Medline (OVID) were used. Key search terms and phrases included immigrants, immigration, mental health, mental illness, barriers, depression, access to care, and education. Boolean operators such as AND and OR with key search terms and phrases were utilized. The initial search with key search terms and phrases resulted in 1,217 publications. Inclusion criteria included studies published in the English language, studies published from 2018 to 2023, male and female gender, mental health, immigrants, and two age filters which included: 19-44 years and 45-64 years. Exclusion criteria included age filters, not of immigrant descent, not meeting criteria for mental illness, and studies not published in English. After inclusion and exclusion criteria were applied, 157 publications were generated and 11 of those were selected for the literature review.

First, it is important to recognize and assess the barriers and challenges immigrants face that ultimately deter them from seeking mental health services. One study focused on the access and use of such services from the perspectives of immigrant service providers found that barriers to accessing services include cultural and language barriers, existence of stigma, existence of system access barriers, and fear of negative consequences (Salami, Salma, & Hegadoren, 2018). A similar study that focused on immigrants and their utilization of services in Canada showed that mental health symptoms were manifested as physical symptoms such as fatigue, issues with sleep, and generalized pain due to stigma (Pandey et al., 2022). This suggests that it would be

beneficial to conduct a thorough physical assessment in conjunction with a psychiatric assessment.

A study by Dedania and Gonzales examined service use among foreign-born and US-born adults with moderate or severe psychological distress (2019). This study found that both groups were less likely to have a usual source of care, less likely to have their mental health care needs met, and more likely to have multiple emergency room visits. This suggested that an assessment and screening of current barriers, risk factors, and current mental health status among adult Russian immigrants is strongly indicated. One study used the survey method to examine the help-seeking resource preferences among different ethnic groups (Markova, Sandal, & Pallesen, 2020). Among the ethnic groups, most preferred traditional resources such as family and friends, before the use of formal or semi-formal resources (Markova, Sandal, & Pallesen, 2020). Women were more open to formal sources while men were more inclined to informal or traditional sources (Markova, Sandal, & Pallesen, 2020). These implications suggest the importance of examining the preferences of different ethnic groups and tailoring care towards those preferences.

When examining barriers to accessing care, immigrants are at a greater risk for hostility within the health care delivery system (Dedania & Gonzales, 2019). Providers must first understand the barriers that exist and further be trained on cultural sensitivity and providing culturally competent care. One study that evaluated current efforts to diminish risks found that healthcare facilities that supplied such education to their providers, as well as stay up to date on current immigration policies, are better assessing and treating this population (Saadi et al., 2020). It is essential to note that not all

healthcare facilities and providers receive in-depth education and training. Implementation of training could result in more culturally competent providers and healthcare facilities.

Despite the need for screening instruments and education among immigrant populations, there is an array of issues that interfere with the allocation of such services. Pandey et al. (2022) recommend that resources be geared towards a holistic model aimed at prevention, promotion, and growth of resilience. A study with similar recommendations emphasized that these strategies are necessary to promote mental well-being and enhance current and future efforts of mental health services. Salami, Salma, & Hegadoren (2018) state that such efforts should be flexible, proactive, and within reach in their community. Furthermore, the model of delivery of care must be one that is culturally sensitive and considers the challenges faced by immigrants.

Primary and secondary preventative strategies to increase education and screening can be completed in a variety of settings and aimed at immigrant-based community programs have proven to be effective. The existing strategies are based on treatment modalities for individuals already diagnosed with a mental health problem, but do not factor in prevention strategies and stress reduction for those who have not yet been diagnosed with a mental health problem (Poudel-Tandukar et al., 2022). Primary prevention strategies must identify common reasons for mental crisis, develop ways to increase awareness proactively, and develop and provide support (Salami, Salma, & Hegadoren, 2018). Organizations providing services to immigrants hold an important role in collaborating with local healthcare organizations to increase their access to care (Ratnayake et al., 2022). Implementation of such strategies and guidelines will guide

immigrants to appropriate resources and positively influence their perceptions and awareness of mental health.

Other strategies should be aimed at strength-based approaches which promote individual mental and community well-being. These strategies can be initiated in the community through community-based programs. Rodriguez, Hill, and McDaniel (2020) state that a program that involves strategies involving enhancement of knowledge, social connectedness, and employment opportunities will ensure access to health services. Mental health services may be cost-prohibitive for immigrants if they lack health insurance and free mental health services may be scarce (Salami, Salma, & Hegadoren, 2018). Interestingly, another study that compared the use of services among immigrant and non-immigrant adults found that both groups were at increased risk for not accessing services due to cost (Dedania & Gonzales, 2019). Public health officials and those working within community-based programs must partner with immigrant populations to create appropriate strategies and programs that reduce financial barriers and increase knowledge and employment opportunities.

Community-based programs can utilize various assessment techniques. A tool called the Problem Management Plus-Immigrants (PMP-I) was created by the World Health Organization (WHO) and directly focuses on prevention techniques within this population. The PMP-I tool encompasses exercise, psychoeducation, and components of cognitive behavioral therapy (Poudel-Tandukar et al., 2022). Future tools aimed towards assessment of immigrants, like the ones mentioned, have the capability to increase mental health discussions, decrease stressors, and prevent future mental health concerns.

Current literature suggests that efforts to strengthen immigrant education on both mental health and available resources are necessary. The study completed by Saadi et al. (2020) promoted use of a Know Your Rights educational program which was offered through community-based organizations. The educational session was delivered by healthcare workers and informed immigrants of their rights; the program was further utilized by healthcare workers to decrease confusion and provide up-to-date information to immigrants (Saadi et al., 2020). The above-mentioned educational program does not include education regarding resources and should therefore be used in conjunction with other educational interventions.

Another study included in the literature review focused on an intervention called Value-Based Counseling (VBC) which had a culturally-sensitive approach and was aimed at growing strength and resilience. Within the control versus intervention group, the individuals in the intervention group had a greater growth of resilience (Orang et al., 2023). This type of intervention can serve as a protective factor and reduce the risk of post-traumatic stress disorder, anxiety, and depression in this population. Resilience results in greater self-esteem, better sense of self, and more opportunities for growth.

In comparison, a study completed by Riviera et al. (2020) explained the benefit of utilizing a team-based approach within primary care. A team-based approach allows for the individual to access other providers they may need, such as social workers and therapists. Team-based approaches within community-based programs ensure greater access to providers within their community and better coordinated care and referrals (Riviera et al., 2020). This strategy allows for services to be free or low-cost. It also allows for the integration of interpreters and bilingual providers. If the providers are

further trained on providing culturally competent care, this ensures better patient care and better mental health outcomes. Riveria et al. (2020) explains that although primary care plays a role in accessing services, system-level changes must be made as well. It is also important to note not all community-based programs have team-based approaches.

The John Hopkins Evidence-Based Practice Model (JHNEBP) is an appropriate problem-solving technique that guides clinical decisions while integrating the best scientific evidence obtainable (White, Dudley-Brown, & Terhaar, 2019). The model ensures best practices and encourages patient satisfaction. Using this model will improve mental health screening and access to care by a three-step process called PET (practice question, evidence, translation) which allows to formulate a practice question related to the problem. Next, current best evidence will be assessed to implement appropriate best practices which may lead to increased screening and access to care.

In summary, immigrants are at an increased risk for mental health concerns due to reasons such as existing barriers, risk factors, cultural and sociodemographic factors, and other challenges. If appropriate strategies aimed at screening and education are implemented, services will be utilized more and mental health outcomes will be better. Also, prevention strategies must be put into place to further decrease barriers and risks associated with mental health. To guide and implement this quality improvement project, the John Hopkins Nursing Evidence-Based Practice Model was used. Gaps in the literature are no focus on Ukrainian and/or Russian immigrants and not enough literature on educational interventions.

Methodology

Design

The project followed a quality improvement (QI) approach. The design was a descriptive, observational pre- and post-design along with an educational intervention. The method that was used was review of test scores. The dates of interest for this project were between March and April 2024.

Setting

The project took place at a non-profit, social services organization in an urban, Midwestern city. The educational seminar itself took place at a home health care agency located in West County for recruitment purposes as much of the population lives close to or in this area. The organization provides services to immigrants such as social services, mental health services, as well as education and advocacy. They serve approximately 3,000 individuals annually. The organizations' employees consist of therapists, counselors, case managers, community access workers, and various leads of departments.

Sample

The anticipated sample consisted of Russian and/or Ukrainian adults who screened positive for depression and attended an educational session on depression. The sample was recruited through convenience sampling via social media platforms such as Facebook and Telegram. Inclusion criteria included 18 years or older or 65 years or younger, Russian or Ukrainian background, and positive indication of depression. Exclusion criteria included under the age of 18 or over the age of 65, not of Ukrainian or Russian background, and no indication of depression.

Data Collection and Analysis

Surveys were completed using the PHQ-8 (Appendix A) to identify those that screened positive for depression. Data that was collected includes demographic data,

PHQ-8 results, and referral to community health services. Demographic data was de-identified by removal of patient-specific identifiers. Data was recorded in an Excel spreadsheet (Appendix B) and descriptive statistics were calculated. SPSS was the software utilized. The anticipated data analysis method was the non-parametric Wilcoxon signed rank test to test for differences between the pre- and post-education PHQ-8 scores.

Approval Processes

Approval of the clinical scholarship project site and mentor was completed. There was no formal approval IRB process needed to be completed through this organization to conduct the quality improvement project. Approval was obtained through the University of Missouri-St. Louis IRB to conduct this quality improvement project. A possible risk of participating was emotional burden from the topics discussed during the intervention. Possible benefits were increased knowledge of mental health and depression, increased knowledge of available resources, and increased access to services among this immigrant population.

Procedures

The documents given to participants and the educational seminar PowerPoints were translated by the principal investigator (PI) and back-translated by two individuals. The first individual holds a bachelor's degree in higher education of Russian/Ukrainian language and literature and taught Russian/Ukrainian literature in Ukraine. She is also a current Registered Nurse (RN) and administrator/owner of a home health agency in which she provides nursing care to Russian and Ukrainian patients. The second individual is a Client Advocate at the International Institute, in which she serves the new Ukrainian families resettling in St. Louis area.

Prior to the educational intervention, participants completed a demographic sheet and a Russian-translated version of the PHQ-8 via paper. The educational intervention took place next. The educational intervention included depression and mental health education, pharmacological and non-pharmacological treatments, complementary and alternative medicine, and available resources (Appendix C). Following the intervention, the PHQ-8 was completed again to compare pre-and post-scores. One month following the education, participants were sent a follow-up email with a follow-up PHQ-8 and questionnaire regarding accessing services.

Results

The total number of participants was seven (*n*=7). Demographics that were collected included gender, age, country of origin, and insurance status. The percentage of females who participated was 57.1% (*n*=4), while the percentage of males who participated was 42.9% (*n*=3). The minimum age of the participants was 20, while the maximum age of the participants was 58 with an average age of 37 (*SD*=14.45). Two out of seven participants were not insured (28.6%) while five out of seven participants were insured (71.4%). All seven participants originated from the country of Ukraine (100%) and all seven (100%) participated in the educational seminar. For a list of participant demographics, see Appendix D.

All seven participants completed the pre-education PHQ-8. The pre-education PHQ-8 score had a mean of 4.86 (*SD*=2.27). Although two participants did not meet criteria for depression, they took part in the educational seminar and their data was recorded and analyzed. The post-education PHQ-8 score had a mean of 4.71 (*SD*=2.29).

All seven participants completed the follow-up survey. Out of the seven participants, four showed a decrease in their PHQ-8 scores. Two of the individuals had the same pre- and post-score. However, one of the seven participants showed an increase in their PHQ-8 score (Appendix E). Three of the seven participants selected yes on follow-up (42.9%), while four of the seven participants selected no (57.1%).

To evaluate if there was a difference between the pre- and post-education PHQ-8 scores, the Wilcoxon signed rank test was calculated (Appendix F). The nonparametric test revealed that the educational intervention did not result in a statistically significant change in the PHQ-8 scores (Z=-0.71, p=0.48). The median rating for the pre- and post-scores was 5.0. Thus, the educational intervention did not produce a statistically significant effect on the PHQ-8 scores.

Discussion

Although the results of the Wilcoxon signed rank test indicate that there was no difference among the pre- and post-education PHQ-8 scores (Z =-0.71, p=0.48), there was a decrease seen in the scores of three out of the seven participants following education; the pre-education PHQ-8 mean score was 4.86 compared with the post-education PHQ-8 mean score of 4.71. However, one of the scores did increase following education which could have resulted in skewed results. Out of the seven participants, five met criteria for depression. Out of those five individuals, three of their PHQ-8 scores decreased while the other two stayed the same. Out of the two participants who did not meet criteria for depression, one of their scores decreased while the other increased. It is also important to note the chance of non-significant results due to a small sample size (n=7).

For the study question of whether depression screening and education within immigrants will increase their access to services, three of the seven individuals indicated that they did receive follow-up services following the screening and educational intervention. Those three individuals did meet criteria for depression at the pre-education screening, indicating that the participants who screened positive did seek out resources. It is important to note that the follow-up question asked if they sought out psychiatry services, therapy, or online resources. The options for the follow-up question were yes or no. Markova, Sandal, & Pallesen, 2020, promote that certain ethnic groups prefer traditional resources over formal resources. Therefore, it may have been beneficial to find out which specific service they sought out to provide more tailored education and resources for this group.

The literature review indicated a holistic model that focuses on promotion and growth of resilience will be beneficial for immigrants and their well-being (Pandey et al., 2022). The education provided to participants included holistic modalities like non-pharmacological treatments, alternative medicine, as well as lifestyle changes. The education also included traditional medical modalities. It is possible that a larger number of participants may have benefitted from a strictly holistic education model.

Another factor worth noting is that the education was targeted towards individuals who present with depression to meet the standards of the project. Following review of the literature, existing strategies are focused on treatment of those with a mental health disorder rather than focusing on strategies targeted towards prevention of mental health disorders (Poudel-Tandukar et al., 2022). Organization-based approaches must include

both primary and secondary prevention methods to not only identify and treat those with existing mental health disorders, but also prevent them from developing them.

A further limitation of the QI study was the difficultly of recruiting participants from this population. Although many more people could have benefitted from this education, they had to be strictly recruited through the organization's social media and one group through Telegram. It is possible that some members who have received services through the organization do not have social media accounts. This population could have also been more open to attending in a more informal setting. It could have been beneficial to have a hands-on approach, i.e., teaching the group coping skills.

Conclusion

In conjunction with a non-profit, social services organization that provides services to immigrants, depression screening and education was implemented. Implementation of screening and education among this group of immigrants resulted in identification of positive depression scores. It also identified those who sought out the provided resources. The partnering organization may implement this education to future clients, but the recommendation is that the education follows a holistic, culturally relevant, and strength-based approach for better outcomes. The population may benefit from a hands-on approach. A further recommendation is organizations providing services to immigrants should partner with clinics and providers serving those populations to better identify, serve, and treat them. Future studies should explore the implementation of holistic or strength-based approaches and focus on prevention strategies within the specific immigrant group.

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Appendix A: Patient Health Questionnaire (PHQ-8)

Over the *last 2 weeks*, how often have you been bothered by any of the following problems?	PHQ-8 / BFRSS conversion	Not at all 0 - 1 day	Several days 2 - 6 days	More than half the days 7 - 11 days	Nearly every day 12 - 14 days
1. Little interest or pleasure in doing things		0	1	2	3
2. Feeling down, depressed, or hopeless		0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much		0	1	2	3
4. Feeling tired or having little energy		0	1	2	3
5. Poor appetite or overeating		0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down		0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television		0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual		0	1	2	3

Interpretation of Total Score/Total Score Depression Severity: 0–4 None, 5–9 Mild depression, 10–14 Moderate depression, 15–19 moderately severe depression, 20–24 severe depression.

Appendix B: Sample Excel Spreadsheet

Patient ID	Gender	Age	Country of origin	Insurance status	Pre PHQ-8 score	Attend education (Y/N)	Post PHQ-8 score	Outreach to services (Y/N)

Appendix C: Educational Seminar Synopsis

Date: Day 1		
Time	Topic/Content	Training/Education Type and Facilitator
12 pm – 12:30 pm	**Lesson 1**: Depression and Mental Health **Objectives:** 1. Gain an understanding of mental health and depression (etiology, pathophysiology, symptoms) 2. Gain an understanding of mental health within immigrant (Russian/Ukrainian) population and existing barriers to accessing care 3. Identify common misconceptions about mental illnesses 4. Acquire knowledge of current statistics on mental health/depression	Group in-service training/education Presented by: Viktoriya Ivantsova
Date: Day 1		
Time	Topic/Content	Training/Education Type and Facilitator
12:30 pm – 1:00 pm	**Lesson 2:** Pharmacological and Non-Pharmacological Treatments, CAM Treatments **Objectives:** 1. Gain an understanding of pharmacological treatments of depression 2. Gain an understanding of non-pharmacological treatments of depression (i.e., therapy, yoga, exercise) 3. Identify CAM treatments for depression 4. Identify lifestyle strategies to better mental health (sleep hygiene, diet, controlling stress, daily routine)	Group in-service training/education Presented by: Viktoriya Ivantsova
Date: Day 1		
Time	Topic/Content	Training/Education Type and Facilitator
1:00 pm – 1:30 pm	**Lesson 3:** Access to Mental Health Services and Resources **Objectives:**	Group in-service training/education

	1. Understand importance of accessibility to mental health services 2. Identify available mental health services at the community, local, state, and federal levels 3. Identify how to overcome barriers to accessing mental health services	Presented by: Viktoriya Ivantsova

Appendix D

Table 1

Participant Demographics by Variable

Variable	*n*	Minimum	Maximum	Mean	SD
Age	7	20	58	37	14.45

Variable	*n*	%
Gender		
Female	4	51.7
Male	3	42.9
Country of Origin		
Ukraine	7	100
Status of Insurance		
Not insured	2	28.6
Insured	5	71.4
Sought out Resources		
Yes	3	42.9
No	4	57.1

Appendix E

Table 2

Comparison of Pre-education and Post-education PHQ-8 scores

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-education PHQ-8 score	7	1	8	4.86	2.268
Post-education PHQ-8 score	7	0	7	4.71	2.289

Note. In reference to the Wilcoxon signed rank test (Appendix F), the difference between the pre-and post-scores was not statistically significant (Z =-0.71, p=0.48).

Appendix F

Table 3

Wilcoxon Signed Rank Test Results

	z	Asymp. Sig. (2-tailed)
Total Post Score/Total Pre-Score	-0.71(b)	0.48

b. Based on positive ranks

Appendix G

Table 4

Wilcoxon Signed Ranks with Negative and Positive Ranks

		N	Mean Rank	Sum of Ranks
Total Post Score/	Negative Ranks	4(a)	2.50	10.00
Total Pre-Score	Positive Ranks	1(b)	5.00	5.00
	Ties	2(c)		

a. Post-education PHQ-8 score < Pre-education PHQ-8 score
b. Post-education PHQ-8 score > Pre-education PHQ-8 score
c. Post-education PHQ-8 score = Pre-education PHQ-score