Training Health Professional Students as Lay Counselors to Treat Depression in a Student-Run Free Clinic

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Abstract

Background: Global initiatives to train lay counselors in mental health care delivery have been effective with depressed patients in low-income countries. However, lay-counselor models have not been employed to address mental health disparities in high-income countries (HICs). This article presents a lay-counselor program for providing mental health interventions to uninsured, undocumented immigrants in a low-resource setting in the United States.
Methods: Mental health professionals trained students as lay counselors to deliver psychoeducation, reduction of psychosocial stressors, and behavioral activation interventions to Spanish-speaking, undocumented immigrants with symptomatic depression. Changes in depressive symptoms prior to and after participation in the program were assessed with the Patient Health Questionnaire-9 (PHQ-9). The educational component of the program was examined administering a survey to the lay counselors.
Results: Twenty-five patients enrolled in the program, 68% female, mean age 39 years (standard deviation [SD] = 12). Eighteen patients completed the program. PHQ-9 data were available from 15 individuals, among whom the mean baseline score was 11.7 (SD = 6.2) and mean final score was 4.6 (SD = 4.2; $p < 0.001$). The survey showed that students had increased interest in both underserved populations and mental health after participation in the program.
Conclusions: Lack of access to psychiatrists and psychologists is a growing problem for uninsured people suffering from depression in the United States. Lay counselor approaches may help to address mental health disparities in low-resource settings in HICs and may also be used to help recruit health professional students into the psychiatric profession.

Introduction

Major depressive disorder, a mental health condition characterized by anhedonia and low mood, is predicted to be the second leading cause of disability and death across the globe by 2020.[1] Although brief psychiatric interventions can effectively treat depression,[2] a gap in access to treatment persists among patients in low-resource settings, primarily due to a lack of individuals skilled in the delivery of evidence-based interventions.[3]

To close this gap, one strategy that has emerged is to train lay counselors (individuals without professional clinical certification) in the delivery of mental health interventions in resource-poor settings.[4,5] While lay counselor approaches have proven effective in the management of depression in low- and middle-income countries (LMICs),[5] less is known about the effectiveness of these approaches for addressing mental health disparities in high-income countries (HICs) such as the United States.

In this article, we present a framework – the Behavioral Health Program for Depression (BHP-D) – that employs a lay counselor model to provide mental health interventions for undocumented immigrants living in the United States. Studies have shown that these immigrants face psychosocial stressors that can result in mood disorders.[6] Such a program could help overcome the restrictive policy measures that have limited access to healthcare for undocumented immigrants since the implementation of the Affordable Care Act in 2010.[7]

The BHP-D was developed in 2012 at a student-run primary care clinic that provides free medical care to the uninsured in order to address the dearth of mental health professionals available for undocumented immigrants in the community.

As part of the BHP-D, a psychologist and a psychiatrist trained bilingual health professional students as lay counselors to deliver evidence-based psychosocial interventions to Spanish-speaking, undocumented immigrants with symptomatic depression. To our knowledge, this is the first study to describe a lay-counselor program for treating depression in the United States.

Methods

Program Model

Mental health concerns, psychosocial stressors, and poor social networks overlap and maintain one another in the patient population at the student-run free clinic. The BHP-D aimed to create a model that addressed these risk factors through an integrated approach in which lay counselors delivered three interventions that are consistent with the World Health Organization's Mental Health Gap Action Program guidelines: psychoeducation, psychosocial stressor reduction, and behavioral activation.[4]

1) Psychoeducation: Salir Adelante [Moving Forward] curriculum: The BHP-D curriculum was adapted from educational modules developed for lay counselors,[8,9] as the "behavioral health advocates" (BHAs) delivering the intervention were students who had no prior mental health training. The curriculum's purpose was to educate immigrant Latino patients to help them better understand mental health topics in the context of migration. The curriculum was delivered to each patient during six to eight one-on-one sessions at the clinic (Table 1). Each session focused on one topic, targeted different psychosocial stressors, and promoted specific behavioral activation exercises.

2) Reduction of Psychosocial Stressors: BHAs worked in conjunction with students volunteering in the social services department at the clinic to mitigate psychosocial stressors affecting patients. The primary social stressors identified in this patient population included issues with health literacy, lack of or inadequate employment, language barriers, food insecurity, domestic violence, and legal issues.

3) Behavioral Activation: Behavioral activation employs short-term and direct problem-solving interventions and has been recommended for Latinos with depression.[10] At each patient's initial visit, BHAs recorded the patient's prior social activities (e.g., family and friends gatherings, sports) that, if reinitiated, had the potential to provide social support and improve mood. BHAs encouraged patients to resume their prior social activities by building on the patient's interpersonal strengths. The BHAs monitored and recorded progress on the resumption of these activities during subsequent visits, thereby monitoring successful implementation of their behavioral activation goals.

Training and Supervision

Each bilingual BHA received approximately 5 hours of training on topics related to mental health, immigration, Hispanic/Latino cultural competency, and psychoeducation. BHAs were trained to administer the Patient Health Questionnaire-9 (PHQ-9, a screening tool for the presence and severity of depression symptoms), deliver clinical vignettes, and use the Suicide Assessment Five-Step Evaluation and Triage protocol when necessary. Training consisted of role-play and didactic sessions, and it was provided in both English and Spanish. After the completion of the pro-

Table 1. Structure of the Behavioral Health Program for Depression (BHP-D)

Intervention	Description	Rationale
Psychoeducation curriculum	- Six to eight sessions; 45-60 minutes each - Progress tracked through administration of PHQ-9 - Themes addressed included depression, stress, mental health and migration, family reorganization after migration, domestic violence, and addiction and substance use	Psychoeducation empowers patients to understand, accept, and cope successfully with mental stress and disorders
Reduction of psychosocial stressors	The following were stressors that BHAs identified, addressed, and tracked in collaboration with the social services department: - Discord within primary support group - Medical literacy and stigma - Occupational problems - Economic hardships - Loss of family structure	Psychosocial stress, particularly in immigrant communities, significantly impacts mental health
Behavioral activation	Identifying and engaging pleasurable, mood-boosting, or efficacy-increasing activities including: - Recognizing social networks - Reconnecting with family and friends - Identifying suitable community groups (*e.g.*, hobbies, volunteer, faith-based) - Practicing exercise, sports, and leisure activities - Visiting community agencies to learn about English language classes and/or employment opportunities	Behavioral activation is one of the most effective CBT components for treating depression

PHQ-9: Patient Health Questionnaire-9; BHA: behavioral health advocate; CBT: cognitive behavioral therapy

gram, surveys to assess satisfaction with the training and the program curriculum were administered to the BHAs. Further, while delivering the intervention, regular supervision was provided by a psychiatrist and a psychologist in two settings:
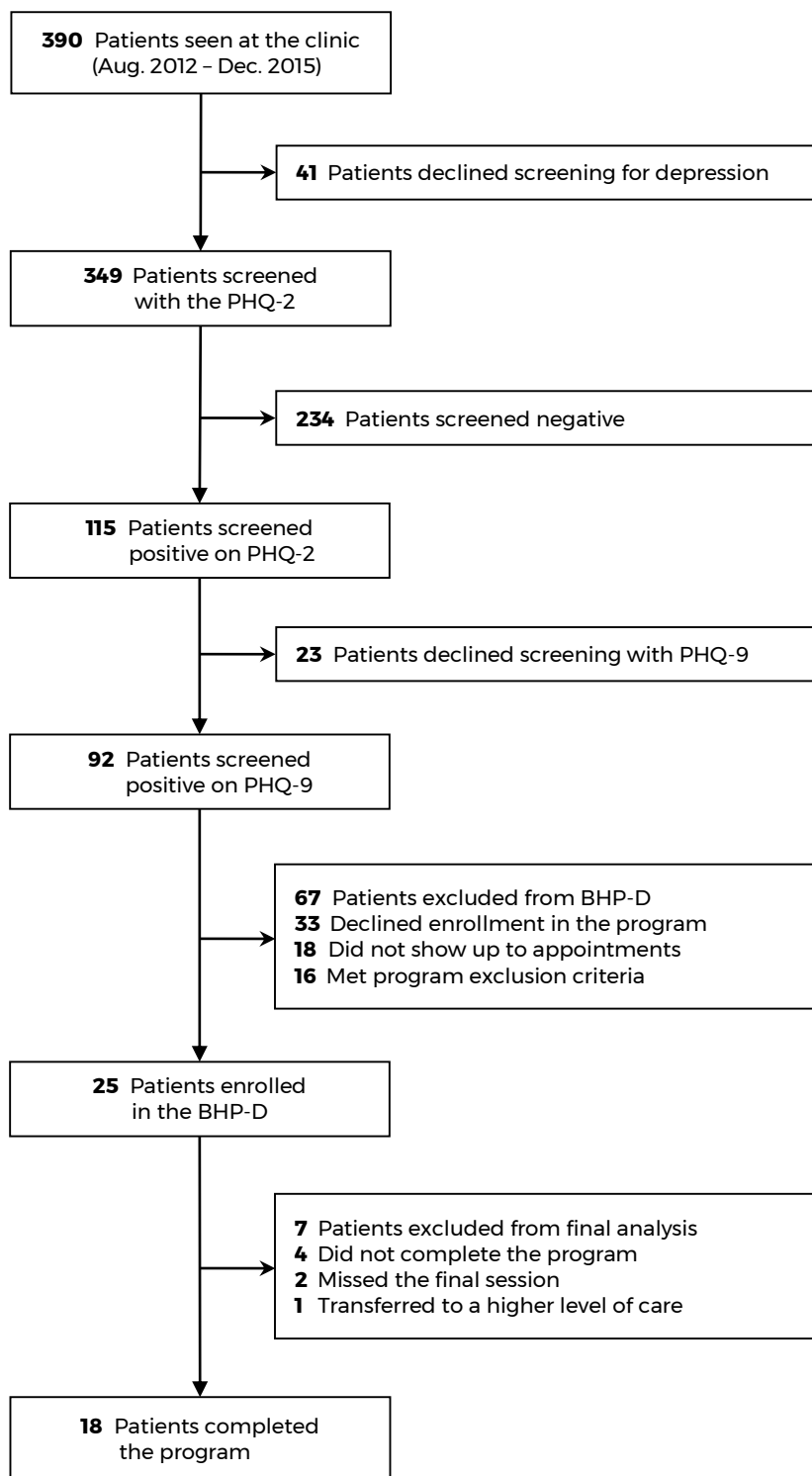
- Direct observation of BHAs during the first psychoeducational session with each patient in the clinic. Direct observation was provided to ensure that a mental health professional could assess potential fit with the BHP-D, need for a higher level of care, and address any risk issues.

- Weekly group debriefing sessions with the BHAs after each meeting with a patient. Each debriefing session consisted of a presentation by the BHA on the patient's medical and social history, the module and activities completed during the session, the patient's reaction to the module, the BHA's impressions on the information disclosed by the patient, and a plan for the next session. Supervisors provided feedback on the presentation, education on relevant mental health topics, and recommendations for ongoing patient education.

Patient Referral to the Program

Patients were referred to the BHP-D through a standardized process. Every patient who entered the clinic for a medical visit was screened for depression with the Patient Health Questionnaire-2 (PHQ-2), a pre-screening test for depression consisting of two questions related to low mood and anhedonia. Patients with a positive PHQ-2 ["yes" to either question] were then further assessed for depression with the full PHQ-9. Patients who had scores from minimal to moderately severe depression [greater than 1 but less than 20] and were interested in the BHP-D were enrolled in the program (Figure 1). Program exclusion criteria included patients who required pharmacological treatment, had mental illnesses other than depression (determined by the supervising attending physician), were actively suicidal, or could not commit to complete at least six sessions.

Figure 1. Referral structure to the Behavioral Health Program for Depression (BHP-D)

390 Patients seen at the clinic
(Aug. 2012 – Dec. 2015)

41 Patients declined screening for depression

349 Patients screened
with the PHQ-2

234 Patients screened negative

115 Patients screened
positive on PHQ-2

23 Patients declined screening with PHQ-9

92 Patients screened
positive on PHQ-9

67 Patients excluded from BHP-D
33 Declined enrollment in the program
18 Did not show up to appointments
16 Met program exclusion criteria

25 Patients enrolled
in the BHP-D

7 Patients excluded from final analysis
4 Did not complete the program
2 Missed the final session
1 Transferred to a higher level of care

18 Patients completed
the program

PHQ-2: Patient Health Questionnaire-2; PHQ-9: Patient Health Questionnaire-9

Data and Statistical Analyses

Results of the program satisfaction surveys administered to the BHAs and demographic, treatment, and PHQ-9 data gathered from participating patients are presented in this article, with approval of the University Institutional Review Board.

For the patients enrolled in the program, changes in depressive symptoms before and after participation in the BHP-D were measured using the PHQ-9 scale. Program retention and completion were also recorded.

The educational component for the BHAs delivering the intervention was examined using the BHA program satisfaction survey. BHAs rated the strengths of the curriculum using a five-level Likert scale in areas such as psychoeducation, clinical skills learned, mental health knowledge gained, cultural competency with respect to Latino immigrants, and increased interest in mental health and working with underserved populations. BHAs also provided written responses to open-ended questions that assessed how the program had influenced their interest in mental health and personal and educational growth. These surveys were administered to the BHAs after they finished volunteering with the program. The minimum time each BHA volunteered with the program was one year; the maximum was over three years.

Results

Patient Screening and Enrollment in the Program

In total, 349 patients were screened with the PHQ-2 between 2012 and 2015. Of those screened, 92 patients (26%) had a positive PHQ-2 and were administered a PHQ-9. Among these patients, the mean PHQ-9 score was 9.8 (standard deviation [SD] = 5.5), which is consistent with minimal symptoms of depression. Twenty-five of the patients who completed the PHQ-9 agreed to enroll in the program (others declined or did not attend their intake appointments).

Behavioral Health Program Outcomes

Twenty-five Latino patients enrolled in the program. The majority (68%) were female, with a mean age of 39 years (SD = 12). Eighteen patients completed the program. Four dropped out after the first session, two missed the last session, and one was referred to a licensed mental health professional. PHQ-9 data were available for 15 of the 18 individuals who completed the program, as the PHQ-9 scores for the 3 other individuals were not properly documented. Among these 15 individuals, the mean score on entry to the program was 11.7 (SD = 6.2), a score consistent with the mild spectrum of a depressive disorder, and mean final score was 4.6 (SD = 4.2), indicating that depressive symptom severity decreased significantly from pre to post intervention (p <0.001, by paired t-test).

Behavioral Health Advocates: Program Satisfaction Analysis

Eight health professional students volunteered as BHAs. Seven completed a satisfaction survey after participating in the program. Six BHAs were medical students (five completing their pre-clinical years) and one was a clinical psychology student. The average number of patients seen by each BHA was 4 (SD = 2).

Quantitative analysis: 50% or more of the BHAs strongly agreed that they felt more comfortable with the following topics/areas after participating in the BHP-D: screening for suicidal ideation, screening for domestic violence, cultural competency with respect to Hispanic/Latino immigrants, and interest in mental health and working with underserved populations.

Qualitative analysis: All health professional students desired to pursue mental health work in the future (four in psychiatry, one in clinical psychology, one in neurology, and one in family medicine). Students described their work as BHAs as a "humbling experience." A common word used to describe the personal lessons learned was "empathy." A student mentioned that working with this population allowed him to "recognize the cumulative impact of social, economic, and cultural marginalization" on this population's mental health. Qualifiers such as "strength" and "resilience" were ubiquitous among all students who described the Hispanic/Latino immigrant population. Finally, some of the memorable quotes that BHAs reported from patients who completed the program included: "I've been more relaxed and the pain went away," and "I know God exists because there are people like you who are willing to listen and help." The shared observation of resilience among the patient population also serves as

an opportunity to promote a strengths-based approach to care. Students can reflect these positive qualities to their patients as a means of building awareness to existing sources of resilience and empowerment as they cope with daily stressors.

Discussion

Our study offers a proof of concept that a lay counselor-based program can effectively deliver mental health interventions to patients with mild to moderate depressive symptoms in a low-resource setting in the United States. Aspects of this program may be generalizable to other populations facing similar mental health disparities across the country. While there is a growing global mental health literature on lay counselor models for treating depression in LMICs,[5] this is the first study to report the successful use of such a model in the United States. Despite its relatively small size, the BHP-D was able to screen, treat, and/or refer 349 undocumented immigrants who otherwise would not have had access to mental health care. These findings that the BHP-D model was successful in significantly improving symptoms of depression are especially important as undocumented immigrants lack access to traditional mental health care.

The primary advantage of the BHP-D's lay counselor approach was its ability to provide care to this population using a limited number of specialist supervisors to train and supervise a larger number of lay counselors in the delivery of evidence-based interventions. Further research needs to be conducted to determine how specialists can be utilized most efficiently and whether this lay counselor model could be implemented in other low-resource settings across the United States.

The BHP-D model may also facilitate the education of health professional students about the lives of underserved Latino patients, provide opportunities for interdisciplinary education, and promote recruitment of medical students into psychiatry. We found that students participating in the program reported increased empathy toward and interest in both underserved populations and patients with mental health disorders. Furthermore, the lay counselor approach provided students with specific, transferrable skills, such as depression and suicide assessment, which are useful in

medical care in general. Since the BHA training did not draw on specific clinical skills, students from all disciplines should be able to participate. Psychiatrists at medical schools should work with students to develop creative and imaginative programs that address the mental health care burden of populations that are often neglected. Positive experiences caring for underserved patients can help recruit students to the psychiatric profession and better equip future physicians of all specialties with the skills in providing mental health.

Our study has important limitations. First, while this program used a lay counselor approach involving participants without a background in mental health care, students who participated in the program were also highly educated, with varying levels of medical knowledge and training. The findings of this study, therefore, may need to be adapted to settings without access to a pool of highly educated individuals. It is worth noting that traditional lay counseling approaches were originally designed to train members of the community, and not students, to become lay counselors. The innovative aspect of our approach was to design a program that enabled lay volunteers in a HIC to treat symptoms of depression. Given that the program was pioneered in a student-run free clinic, our volunteers were naturally students. In efforts to balance the ongoing training opportunity for students with sustainable strategies that may include participation from community members, we have considered expansion to a peer support group led by graduates of the BHP-D. This would offer an ongoing support system with opportunity to continue learning about available resources. Second, as this study was based in a student-run free clinic, the psychiatrist, psychologist, and students in the BHP-D did not receive financial compensation for their work. Further research should determine how a lay counselor model might be employed in settings that do not rely on volunteers. Third, the number of treated individuals in the BHP-D was relatively small (n = 18), which limited the analysis of the effects of the program on depression. However, prior studies have demonstrated the efficacy of such programs on the treatment of depression and this article's primary purpose was to present the application of a model of care in a particular setting, not to demonstrate effectiveness. Fourth, the number of counselors in

the program was also relatively small, limiting our analysis of the effects of the BHP-D on educational outcomes. Last, we found that many depressed patients who were eligible chose not to enroll in the actual program. Factors that might account for patients not enrolling (including lack of regular transportation, conflicts with program timing, and stigma) deserve further investigation. It is worth noting that twice as many women enrolled in the program in comparison to men. Based on the literature, this may be partially understood as gender-related, as men are often less likely to seek mental health supports in comparison to women.[11]

In conclusion, the lack of access to psychiatrists and psychologists is a growing problem for uninsured people suffering from depression in the United States. Lay counselor approaches may help to address mental health disparities in low-resource settings in HICs and may also be used to help recruit medical students into the psychiatric profession.

Disclosures

The authors have no conflicts of interest to disclose.

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