

SALUDD MENTAL- Social Services Access for Latinos in Underserved Communities with Depression and Diabetes: Barriers to and Opportunities for **Mental Health Care
from Patient and Provider Perspectives**

**Shelby Ramion, PharmD, Maria Carrillo, MA, Karem Elizondo, PharmD, BCACP, Gabriel Fietze, PhD,
Liliana Lunares, PharmD, JoAnne Savage, PharmD, Jeri Sias, PharmD, MPH**

Introduction

The need for increased access to comprehensive mental health treatment among patients with diabetes and depression is of particular importance in the Latino community. Studies have shown that approximately 30% of patients with diabetes in low-income, predominantly Hispanic communities suffer from major depression, compared to a national prevalence of only 6.7% of all adults.^{1,2} Additionally, having comorbid depression is associated with worse health outcomes than either disease state alone.^{3,4} Further complicating this situation for Latinos is their increased risk for diabetes-related disabilities, mortality, and complications as well as underutilization of mental health services compared to non-Hispanic whites.^{1,5-8} Thus, knowing that depression management has been shown to improve diabetes outcomes,³⁻⁵ there remains a need to better understand what can be done to improve access to mental health services in our underserved communities.

Several research projects and national surveys have collected information on Latino patients' perceived barriers to accessing mental health services, but few, if any, have directly compared this perspective to that of their primary care providers (PCPs).⁸⁻¹³ This project builds on previous research by evaluating the differences between these two groups' perceived barriers—specifically, to utilizing counseling services after an internal social services referral in a federally qualified health center (FQHC). Lastly, in order to better understand the potential roles of community pharmacists in mental health care access, this project assessed patients' comfort level with voicing mental health symptoms and concerns with their PCP versus with the clinical pharmacists that manage their diabetes. The differences in these responses provided valuable insight into potential opportunities to improve community clinic referral processes, increase mental health care utilization, and provide a more solid platform of understanding between patients and providers.

Project objectives

1. Evaluate differences between patient and provider perceptions of which barriers most prevent utilization of mental health services by low-income Latino patients with depression and diabetes
2. Assess the above demographic's comfort level discussing their mental health symptoms and concerns with their clinical pharmacist
3. Propose adaptations to social services referral processes and/or clinic infrastructure based on reported barriers to improve mental health resource utilization

Setting

La Fe is a FQHC consisting of six community clinics located across a 40-mile spread in the diverse border town of El Paso, Texas. Patients are primarily Spanish-speaking, underserved Latinos from both sides of the US-Mexico border. Services provided at La Fe are broad and aim to provide holistic care for the patient. The clinical pharmacy team of La Fe provides chronic disease state management under collaborative practice agreements (CPAs). Under this CPA, clinical pharmacists also screen annually for depression using the Patient Health Questionnaire Two and Nine (PHQ-2, PHQ-9). Referrals to the social services department are generated by the clinical pharmacist for positive screening results, as appropriate.

Sample and Participant Selection

A total of nine female and six male patients ($M_{\text{age}} = 63.53$, $SD = 8.50$) and 10 providers were recruited to participate in the study. The average HA1c level was 9.53 ($SD = 2.17$) and the average PHQ-9 score was an 8.67 ($SD = 7.16$).

Over 800 patients were identified via Electronic Health Record (EHR) reports as having both diabetes and depression. Of that group, 64 were currently managed by a clinical pharmacist under CPA; 19 met all inclusion and exclusion criteria; and 15 consented to complete the questionnaires. Patient participants were recruited by telephone or during appointments with their clinical pharmacist. Questionnaires were distributed to all La Fe clinics, and all providers were invited to participate. 10 of 16 providers completed and returned the survey.

Inclusion Criteria. To be included in this project patients must be 18 years or older, have accessed clinical pharmacy services within the previous 12 months, have a current EHR diagnoses of Type 2 Diabetes (T2DM) and a depressive disorder, have a documented referral to La Fe Social Services within the last 18 months, and be a registered patient at one of the La Fe Clinics.

Exclusion Criteria. Children and Adolescents (<17 years of age), patients who score less than three on the PHQ-2, and patients who score less than 5 on the PHQ-9 will be excluded from this project.

Measures

Perceived Barriers Questionnaire. A 10-item questionnaire assessed ten barriers to mental health access in low-income Latino patients with comorbid diabetes and depression: 1) financial, 2) availability, 3) scheduling confusion, 4) referral confusion, 5) appointment reminder, 6) stigma, 7) low perceived need 8) lack of motivation, 9) office availability, and 10) transportation. Participants were consented and provided the following instructions in their preferred language, "Please rank each item one to five based on how much it affected your ability to use La Fe Social Services." Participants then responded to the 10-items. All participants were given the option to read and respond in writing or be read to and respond verbally to account for the low literacy levels in the community. Each item included an example and was worded with the intent to minimize guilt or shame felt by the respondent. Sample item: "Available financial resources (For example: financial concerns such as difficulty paying for additional visit or programs)." Response options ranged from 1 (no influence at all) to 5 (had big impact, was the main problem). The 10-items were examined independently, and a composite score was created by calculating an average of the 10-items. Cronbach's alpha for the 10-items was equal to 0.77.

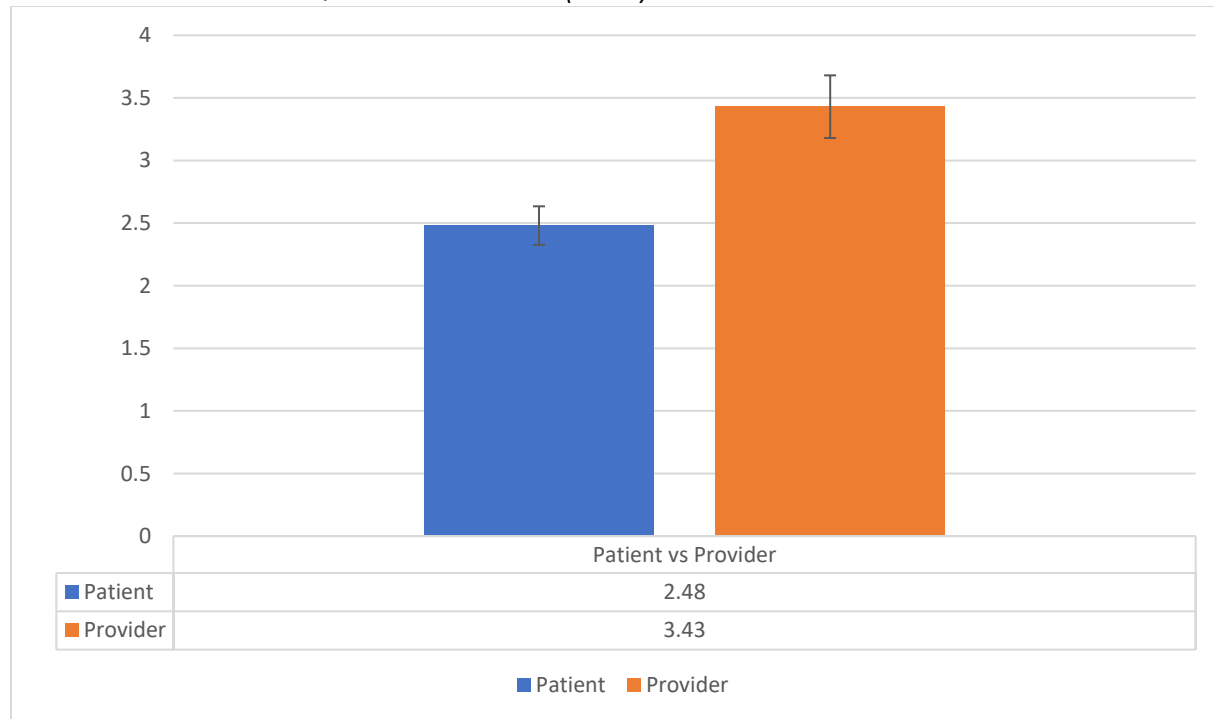
Comfort Questionnaire. Two-items assessed comfort with discussing mental health symptoms and concerns with either a pharmacist or primary care provider. Sample items: “How comfortable are you, on a scale of 1-10, sharing your mood-related questions and symptoms with your clinical pharmacist?” “How comfortable are you, on a scale of 1-10, sharing your mood-related questions and symptoms with your primary care provider?”

Semi Structured Interviews. Four interview guide questions were asked to supplement survey results. Two questions assessed patient perception of the social services referral process and suggestions for improvement. Sample items: “What part of the referral process did you like?” “What would you change about the referral process to make it easier or more accessible?” The last two questions assessed who the participant would like to have managing their conditions and how frequently. Sample items: “Who would you like to have on your healthcare team to help manage both your diabetes and depression?” “How frequently would you like to be seen for your diabetes and depression?”

Results

Perceived Barriers Questionnaire. An independent samples *t*-test compared patient and provider responses to the total barrier questionnaire score. A statistically significant difference emerged between patients ($M = 2.48, SD = .56$) and providers ($M = 3.43, SD = .79; p = .002, Hedges' g = 0.39$; see Figure 1). Similarly, the non-parametric alternative (Mann-Whitney U test) revealed a statistically significant difference between patients ($Md = 2.40, n = 15$) and providers ($Md = 3.25, n = 10; p = .003$).

Figure 1.
Mean Perceived Barriers Questionnaire Scores ($n = 25$).



A series of independent samples *t*-tests compared patient and provider responses to each of the items on the perceived barriers questionnaire. A statistically significant difference emerged between

patients ($M = 3.00$, $SD = 1.41$) and providers ($M = 4.80$, $SD = .42$; $p = .001$, Hedges' $g = 1.54$; see Figure 2) on perceptions of *financial barriers*. Similarly, the non-parametric alternative (Mann-Whitney U test) revealed a statistically significant difference between patients ($Md = 3.00$, $n = 15$) and providers ($Md = 5.00$, $n = 10$; $p = .001$) on perceptions of *financial barriers*.

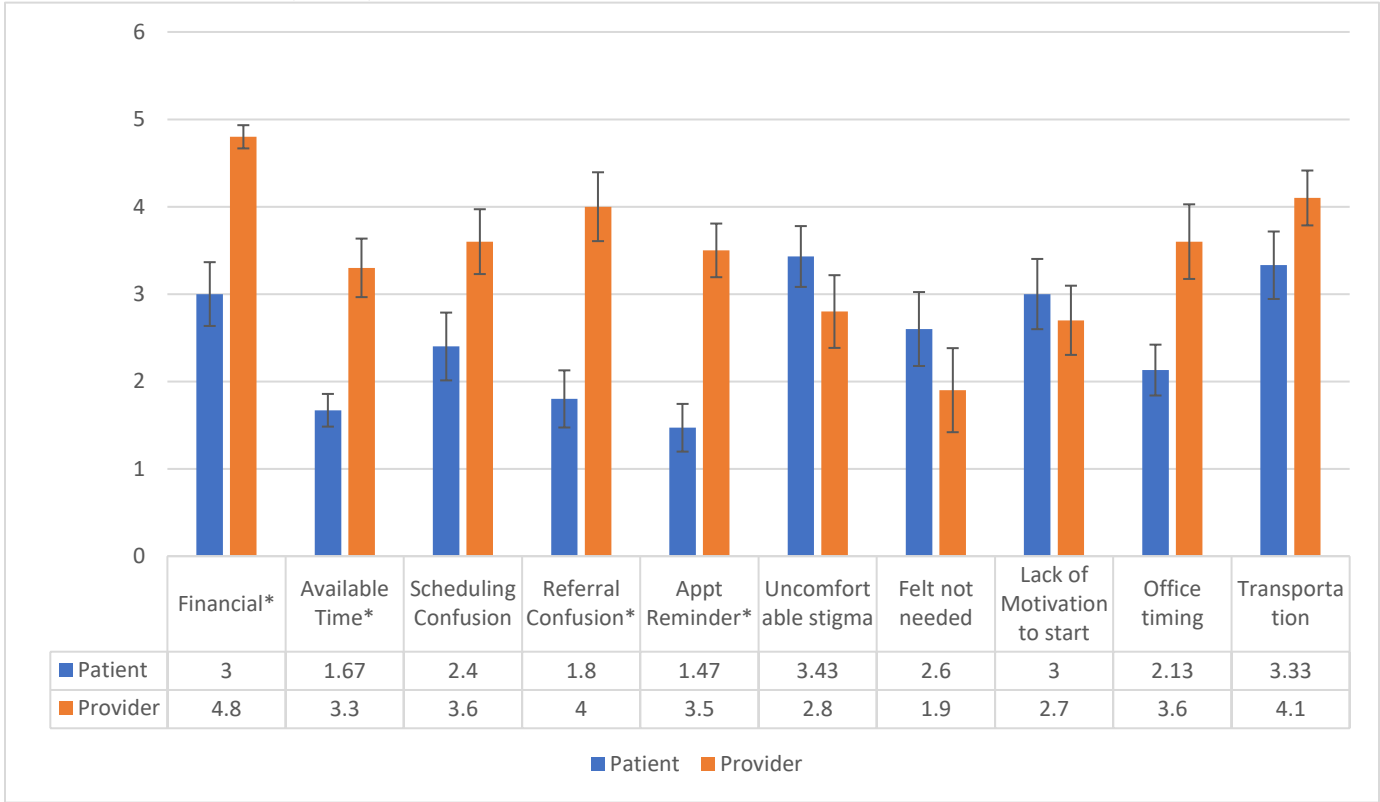
Additionally, a statistically significant difference emerged between patients ($M = 1.67$, $SD = .72$) and providers ($M = 3.30$, $SD = 1.06$; $p < .001$, Hedges' $g = 1.81$; see Figure 2) on perceptions of *available time barriers*. Similarly, the non-parametric alternative (Mann-Whitney U test) revealed a statistically significant difference between patients ($Md = 2.00$, $n = 15$) and providers ($Md = 3.00$, $n = 10$; $p = .001$) on perceptions of *available time barriers*.

Moreover, a statistically significant difference emerged between patients ($M = 1.80$, $SD = 1.26$) and providers ($M = 4.00$, $SD = 1.25$; $p < .001$, Hedges' $g = 1.69$; see Figure 2) on perceptions of *referral confusion barriers*. Similarly, the non-parametric alternative (Mann-Whitney U test) revealed a statistically significant difference between patients ($Md = 1.00$, $n = 15$) and providers ($Md = 4.50$, $n = 10$; $p = .001$) on perceptions of *referral confusion barriers*.

Finally, a statistically significant difference emerged between patients ($M = 1.47$, $SD = 1.06$) and providers ($M = 3.50$, $SD = .97$; $p < .001$, Hedges' $g = 1.91$; see Figure 2) on perceptions of *appointment reminder barriers*. Similarly, the non-parametric alternative (Mann-Whitney U test) revealed a statistically significant difference between patients ($Md = 1.00$, $n = 15$) and providers ($Md = 3.00$, $n = 10$; $p < .001$) on perceptions of *appointment reminder barriers*.

Differences in perceptions of *office timing* ($p = .007$) and *scheduling confusion* ($p = .045$) met conventional statistical significance, however, did not fall below the Bonferroni corrected p -value (see Figure 2).

Figure 2.
Perceived Barriers (N =25).



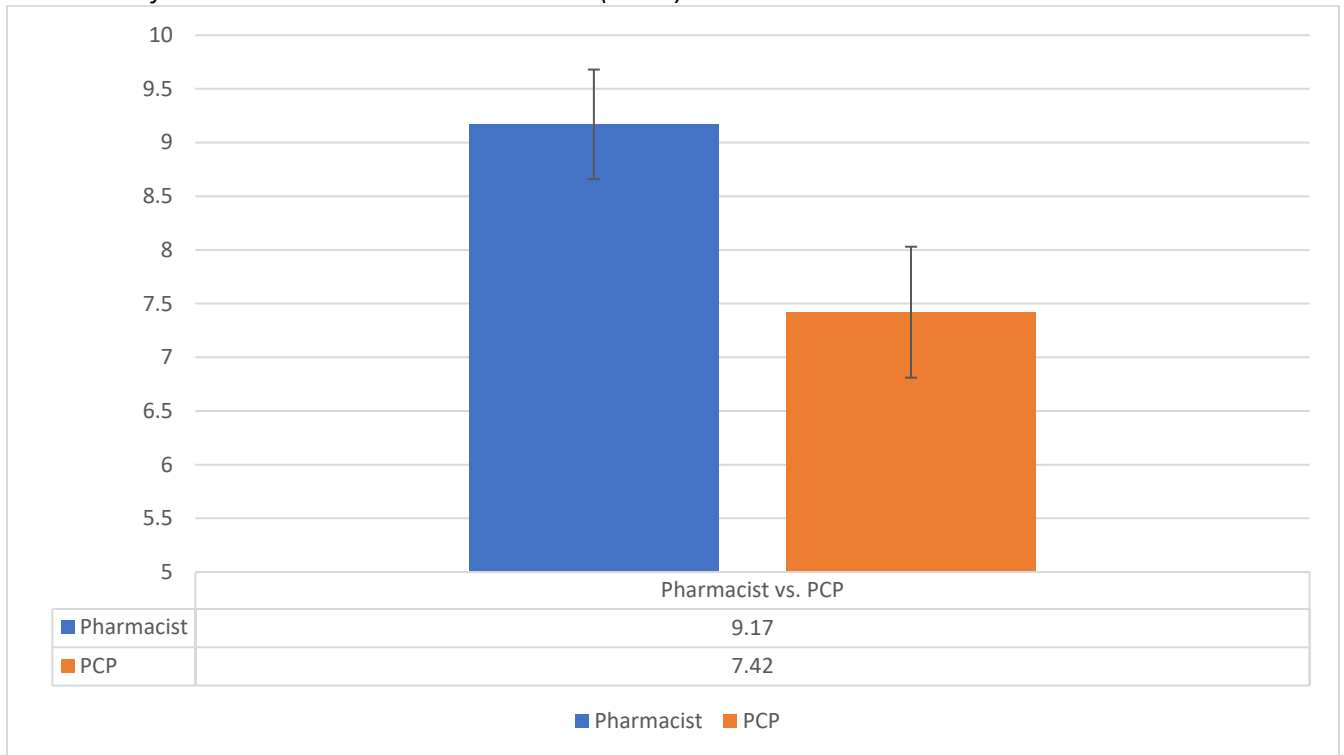
Note: Asterisks indicate statistically significant difference.

Table 1.
Perceived Order of Barrier Significance

RANK	PATIENTS (N=15)	MEAN SCORE	PROVIDERS (N=10)	MEAN SCORE
1	Uncomfortable (stigma)	3.4	Financial	4.8
2	Transportation	3.3	Transportation	4.1
3	Financial	3.0	Referral Confusion	4.0
4	Lack of Motivation	3.0	Scheduling Confusion	3.6
5	Low Perceived Need	2.6	Office Availability	3.6
6	Scheduling Confusion	2.4	Appt Reminder	3.5
7	Office Availability	2.1	Patient Availability	3.3
8	Referral Confusion	1.8	Uncomfortable (stigma)	2.8
9	Patient Availability	1.7	Lack of Motivation	2.7
10	Appt Reminder	1.5	Low Perceived Need	1.9

Comfort with Clinical Pharmacist or PCP. A paired samples *t*-test was used to compare patient responses to the *comfort questionnaire*. A statistically significant difference emerged between patients' comfort with a clinical pharmacist ($M = 9.17, SD = 1.75$) and a PCP ($M = 7.42, SD = 2.11; p = .007, Cohens' d = -0.90$; see Figure 3). Similarly, the non-parametric alternative (Wilcoxon Signed Rank Test) revealed a statistically significant difference in patients' comfort discussing mental health symptoms and concerns with either a clinical pharmacist or primary care provider, $z = -2.54, p = .011$, with a large effect size ($r = -.73$). The median scores for patients' comfort with clinical pharmacists was higher ($Md = 10.00$) than with primary care providers ($Md = 8.00$) on perceptions of *appointment reminder barriers*.

Figure 3.
Patient Comfort with a Clinical Pharmacist or PCP ($n = 12$).



Semi-structured Interviews. Responses to interview questions were obtained from 14 participants and assessed using only descriptive statistics. Common responses to the positive aspects of the referral process included: the “warm” and “friendly” attitudes of social services staff (7 of 14, 50%), not needing to initiate contact for scheduling (i.e. social services department called the participant first to assess needs and scheduling) (7 of 14, 50%), and having appointment reminder calls (4 of 14, 28.6%).

Twelve participants (78.5%) reported a desired frequency of appointments to be at least every two months. Of those twelve, two responded as “more than monthly.” The longest desired duration between appointments was three months, reported by two participants.

When asked to describe the ideal healthcare team to manage their diabetes and depression, “clinical pharmacist” and “primary care provider” were ubiquitously included. Other responses included “psychiatrist” (35.7%) and a “home health aide” (21.4%).

Discussion

Findings from the Perceived Barriers Questionnaire show an unexpected disconnect between what providers perceive as patients' top barriers to mental health care and what patients report them to be. Providers ranked all structural barriers (e.g. financial, scheduling confusion, office availability, etc.) higher than the three attitudinal barriers (e.g. Stigma, Lack of Motivation, Low Perceived Need). In contrast, all three attitudinal barriers appear in the top five rankings by patients, with "stigma" being number one. Patients' concern with mental health stigma is consistent with previous research findings showing stigma to be a large factor in not seeking and dropping out of mental health treatment in Latino populations.^{8,12,13} However, the discrepancy in rank order suggests that providers may underestimate or not be aware of the prominent role stigma plays in this population.

On the other hand, both groups ranked "transportation" and "financial" in the top three prohibitive factors, which, given the low-income status of La Fe patients, is to be expected. However, it is important to note that, while both groups ranked "financial" towards the top of this list, the provider group's mean score was significantly higher. This could indicate that, even though both groups agree finances are a significant factor, providers may be overestimating the total burden it has on these patients. These results could be affected by response bias, however, if patients did not feel comfortable admitting the extent of their financial insecurity.

The Comfort Questionnaire results are reflective of the intimate relationships formed between community pharmacists and their patients and are worth noting. Patients reported very high levels of comfort (9.1 out of 10) discussing their mental health symptoms and concerns with their clinical pharmacists. Because of the increased duration and frequency of appointments with La Fe clinical pharmacists compared to other providers, the higher comfort discussing mental health is not unexpected but does warrant further research to determine whether this result is consistent in other community settings. If so, this information could provide a valuable platform for exploring the expansion of community pharmacists' roles in managing mental health. This potential is further supported by the unanimous desire expressed by participants to include a clinical pharmacist on their diabetes and depression management team. Because all participants were currently or recently managed by a clinical pharmacist, they were already familiar with the clinical role and capabilities we have and thus biased to include us in their response. This bias limits the generalizability of these results to only those patients being managed by a clinical pharmacist. Nevertheless, the conclusion can be drawn that these patients would feel comfortable having a clinical pharmacist involved in their mental health care.

Limitations of this project include a small sample size, potential bias in patient responses due to hesitance to disclose financial instability, and potential inaccuracy of recall due to significant lapse in time since their last social services referral.

Incorporating these findings with measurable actions will be an important step moving forward to improve mental health care utilization rates and follow up. Recommendations and opportunities for the future based on the results of this study are outlined below:

1) Stigma and skepticism should be directly addressed in-office and incorporated into clinic environment

- Normalize mental health with supportive awareness posters and events
- Build a short review of mental health symptoms or “mood checks” into every provider visit, regardless of past medical history
- Provide annual empathy and awareness training for all clinic staff

2) Providers must be aware of which barriers affect their patients

- Screen for barriers with questions like, “Do you have reliable transportation?” and “What time of the day are you available for appointments?” during every new patient’s intake process

3) Address structural barriers at point of referral

- Utilize medical assistants and nurses to help explain the referral process and assist in appointment scheduling

Conclusion

As a result of this study new insight was gained into the noncongruent perceptions of mental health barriers between low-income Latino patients and their primary providers. Providers may overestimate the impact of structural or process related barriers while underestimating the burden of stigma. Thus, moving forward, distinct efforts should be made in community healthcare settings to combat mental health stigma and normalize the experience of depression and other mental health disorders. Additionally, patients report feeling comfortable discussing mental health concerns with clinical pharmacists and expressed a desire to include them on their treatment team. Because of the accessibility of community pharmacists, direct involvement in depression management could be an important first step to increasing access to interprofessional mental health treatment.

References:

1. Nguyen AL, Green J, Enguidanos S. The relationship between depressive symptoms, diabetes symptoms, and self-management among an urban, low-income Latino population. *J Diabetes Complications*. 2015;29(8):1003-8. doi: 10.1016/j.jdiacomp.2015.09.004.
2. National Institute of Mental Health. Major Depression: Prevalence of Depressive Episode Among Adults. https://www.nimh.nih.gov/health/statistics/major-depression.shtml#part_155029. Accessed August 18, 2018.
3. Gross R, Olfson M, Gameroff MJ, Carasquillo O, Shea S, Feder A. Depression and glycemic control in hispanic primary care patients with diabetes. *J Gen Intern Med*. 2005; 20:460–6.
4. Egede LE, Osborn CY. Role of motivation in the relationship between depression, self-care, and glycemic control in adults with type 2 diabetes. *The Diabetes Educator*. 2010;36(2):276–283. <http://dx.doi.org/10.1177/0145721710361389>.
5. Clement S, Schauman O, Graham T, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol Med*. 2015;45(1):11-27. doi: 10.1017/S0033291714000129.

6. Hansen MC, Cabassa LJ. Pathways to depression care: help-seeking experiences of low-income Latinos with diabetes and depression. *Journal of Immigrant and Minority Health*. 2012;**14**:1097–1106.
7. Seraphio Derr A. Mental Health Service Use Among Immigrants in the United States: A Systematic Review. *Psychiatr Serv*. 2016; **67**(3): 265–274. doi: 10.1176/appi.ps.201500004.
8. Andrade LH, Alonso J, Mneimneh Z, et al. Barriers to mental health treatment: results from the WHO World Mental Health surveys. *Psychol Med*. 2014;**44**(6):1303–1317. doi:10.1017/S0033291713001943
9. Bauer MS, Williford WO, McBride L, McBride K, Shea NM. Perceived barriers to health care access in a treated population. *Int J Psychiatry Med*. 2005;**35**(1):13-26. DOI: 10.2190/U1D5-8B1D-UW69-U1Y4.
10. Chen S, Conwell Y, Cerulli C, Xue J, Chiu HFK. Primary care physicians' perceived barriers on the management of depression in China primary care settings. *Asian J Psychiatr*. 2018;**36**:54-59. doi: 10.1016/j.ajp.2018.06.019.
11. Teng L, Robertson Blackmore E, Stewart DE. Healthcare worker's perceptions of barriers to care by immigrant women with postpartum depression: an exploratory qualitative study. *Arch Womens Ment Health*. 2007;**10**(3):93-101.
12. Cooper LA, Gonzales J, Gallo J, et al. The Acceptability of Treatment for Depression among African-American, Hispanic, and White Primary Care Patients. *Medical Care*. 2003;**41**(4):479–489.
13. Mojtabai R, Olfson M, Sampson NA, et al. Barriers to mental health treatment: results from the National Comorbidity Survey Replication. *Psychol Med*. 2011;**41**(8):1751–1761. doi:10.1017/S0033291710002291