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ORIGINAL PAPER

Mental Health Stigma Among Spanish-Speaking Latinos in Baltimore, Maryland

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Abstract

To assess mental health-related stigma in an emerging Latino immigrant community and explore demographic characteristics associated with stigma. We surveyed 367 Spanish-speaking Latino adults recruited at community-based venues in Baltimore, Maryland. The survey included sociodemographic questions, the Depression Knowledge Measure, Personal Stigma Scale, and the Stigma Concerns about Mental Health Care (SCMHC) assessment. Multiple regression models examining associations between personal stigma and stigma concerns about mental health care, respectively, were constructed using variables that were statistically significant in bivariate analyses. Being male, having less than high school education, reporting high importance of religion, and having lower depression knowledge contributed to higher personal stigma. When controlling for other variables, only depression knowledge contributed unique variance to the prediction of higher SCMHC. Efforts to improve access to and quality of mental health care must be paralleled by ongoing efforts to reduce depression stigma within emergent immigrant Latino communities.

Keywords Mental health · Depression · Stigma · Latino · Immigrant

Introduction

The mental health needs of immigrants are influenced by premigration, migration, and postmigration experiences [1–5]. New Latino immigrants in the U.S., especially those without documentation and those who settle in "emerging communities" (communities where immigrant communities have been small and then rapidly expand), may be particularly vulnerable to negative mental health outcomes. Immigrant Latinos living in emerging communities report less positive healthcare outcomes, greater unmet need for medical care, and lower satisfaction with care [6]. In emerging communities, immigrants may face increased psychological stress resulting from few ethnic enclaves, limited Spanish language and infrastructure support, and greater community-level violence [7–9].

While Latino immigrants are at high risk of depression [2, 10] and depression is highly treatable, there are high levels of unmet mental health needs amongst Latino immigrants, particularly for undocumented immigrants, immigrants in emerging communities, and those with limited English proficiency (LEP) [11–15]. Substantial structural barriers, including restrictions in access to insurance and limited supply of culturally and linguistically competent providers, contribute to these unmet needs [16–19]. For those who do access mental health care, Latinos are less likely to receive care meeting best practice guidelines [20, 21], and more likely to end care prematurely [22, 23]. While it is critical to address structural level barriers, sociocultural barriers must also be addressed as these also have a significant impact on access to and utilization of mental health services [16, 17].

One such barrier is mental health stigma, defined as the presence of negative beliefs surrounding mental illnesses, persons with mental illness, and mental health treatment

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[24]. Stigma is a powerful discrediting social label that dramatically impacts how individuals view themselves and how they are viewed by others [25, 26]. Stigma is a universal phenomenon but is manifested in specifically local ways [27]. Cultural meanings given to stigmatized attributes, such as having a mental illness, are reproduced through social interactions and linked to the actions of groups of people within specific contexts [25, 26]. In Latino communities, stigma may involve associating mental illness with a weak character, *volviendose loca/o* (going crazy), witchcraft/spells, demonic influence, and/or lack of faith in God [28–32]. Notably, research suggests that Latino men who are thought to be experiencing depression experience higher levels of stigma than Latina women thought to be experiencing depression [33]. This may be related to cultural expectations of restrictive emotionality among males and of a man being able to be self-sufficient and handle his own problems without outside help [34–36]. Among Latinos, mental health stigma is associated with lower engagement in and quality of care and predicts non-adherence with treatment recommendations, including prescribed psychotropic medications [37–39].

Given the many ramifications of mental health stigma, Link and colleagues argue that it is vital for public health practitioners to monitor stigma beliefs [40]. Better understanding mental health stigma in emerging settlement areas may inform which interventions might be acceptable and ultimately feasible and effective. Therefore, we aimed to (1) assess mental health-related stigma in an emergent Latino immigrant community; and (2) explore demographic characteristics associated with increased mental health-related stigma. The assessment of stigma was designed to contribute important knowledge on the psychological process of mental health stigma as contextualized to a particular community, i.e. Latino immigrants in emerging destinations.

Methods

Setting

Baltimore, Maryland is an emerging settlement for Latino immigrants that has experienced a dramatic growth in the Latino population over the last 15 years and is home to a diverse immigrant community primarily from Central America and Mexico. Compared to the general U.S. Latino population, Baltimore Latinos are more likely to be foreign born, undocumented, LEP, low income, and have low educational attainment [41]. The recent influx of young, foreign-born Latinos has outpaced the city's capacity to provide culturally and linguistically appropriate health and social services [42].

Study Design and Sample

From July to October 2019, we conducted a cross sectional study to characterize mental health stigma among a convenience sample of Spanish-speaking Latino adults in Baltimore, Maryland. Trained research assistants recruited respondents at selected street- and community-based venues frequented by foreign-born Latinos, as informed by our prior work mapping and assessing locations for sampling the Latino immigrant population in Baltimore [43]. Participants were recruited at community-based organizations serving Latino immigrants, street locations including open air day laborer markets, a large city park, and community events.

Participants were eligible for inclusion if they were over 18, self-identified as Latino, and were able to complete the survey in Spanish. Since the goal was to explore depression-related stigma in the local community of Latino immigrants, U.S. born Latinos interacting with Latino immigrants in these spaces could participate if they met the eligibility requirements. Bilingual research assistants approached individuals at each venue to describe the survey details (including confidentiality, risks of participation, and time required for participation) and assess eligibility. Survey data was collected in Spanish on a tablet using Qualtrics software with embedded audio files so all questions and possible responses could be read and listened to in the event of literacy barriers. Surveys were completed at the time of recruitment. Before beginning the survey, participants read and listened to the following statement (in Spanish): Your completion of this survey or questionnaire will serve as your consent to be in the research study. The survey took approximately 15 minutes to complete, and participants received $10 for their participation. The Institutional Review Board of the Johns Hopkins School of Medicine approved the study.

Measures

Sociodemographic Measures

Participants were asked their age, gender, country of origin, religious affiliation and importance of religion to them (not important, somewhat important, important, very important), highest level of education, and English proficiency (I do not understand any English or only a few words/phrases, I can understand some spoken English, I can understand most spoken English, and I am fluent or near fluent in English). For those born outside of the U.S. mainland, participants were asked how long they had lived in the U.S. Finally, participants were asked if they had ever talked to a mental health provider to address a personal experience such as sadness, emptiness, loneliness, anxiety, or stress (yes/no).

Depression Knowledge Measure (DKM)

The DKM is a 17-item measure assessing knowledge of depression symptoms and treatment [44, 45]. Symptom recognition is assessed with a list of 5 DSM-IV depression symptoms (e.g., feeling agitated, loss of interest) and 5 non-depressive symptoms (e.g., being violent); respondents are asked to identify the depressive symptoms. Treatment knowledge is assessed through 7 true/false questions adapted from the Depression Literacy Questionnaire [44–46]. Respondents receive one point for each correct answer, with a range of possible scores between 0 (all incorrect) to 17 (all correct). The DKM has previously been used among Spanish-speaking Latino populations in the U.S. [e.g., 45, 47, 48].

Personal Stigma Scale (PSS)

The PSS is a 9-item subscale within the Depression Stigma Scale that assesses an individual's personal attitudes towards people with depression [44]. Items included beliefs of depression as an illness ("Depression is not a real medical illness"), the extent to which people can control their depression ("People could snap out of depression if they wanted"), depression as a character flaw ("Depression is a sign of personal weakness"), depression as dangerousness or unpredictable ("People with depression are dangerous"), avoidance of persons with depression ("It is best to avoid people with depression so you don't become depressed yourself"), personal shame or concealment ("If I had depression, I would not tell anyone"), and discrimination ("I would not employ someone if I knew they had been depressed"). Each item is answered on a 5-point Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree). The total scores range from 0 to 36 with higher scores indicating higher levels of personal depression stigma. The PSS has previously been used with Spanish-speaking Latinos [e.g., 49]. The PSS demonstrated acceptable internal consistency within our survey sample (a = 0.70).

Stigma Concerns About Mental Health Care (SCMHC)

The SCMHC is a 3-item measure assessing stigma-related barriers to the utilization of depression treatment (internalized stigma, fear of stigmatization, and stigma from family in seeking mental health care) [50]. Responses are coded as (0) disagree, (1) agree, and (7) don't know/refuse. Respondents receive one point for each response of "agree," which indicates agreement with the stigma-related barrier. The total scores range from 0 to 3 with higher scores indicating an increased internalization of stigma to mental health care. The SCMHC has previously been tested in Spanish and validated with samples comparable to ours [50]. The SCMHC demonstrated acceptable internal consistency within our survey sample (a = 0.72).

Analysis

Univariate, bivariate, and multivariate analyses were conducted with SPSS Software Version 26.0. Effect size was calculated using Cohen's d statistic. Bivariate analyses (i.e., chi-square tests, t-tests) were conducted to assess the associations between sociodemographic characteristics and depression knowledge with personal stigma and stigma concerns about mental health care scores. The following factors were considered: gender (0 = male, 1 = female), age (continuous), education (0 = less than high school, 1 = high school or more), importance of religion (0 = not important or somewhat important, 1 = important or very important), time in the U.S. (0 = 5 years or less, 1 = more than 5 years), and depression knowledge (continuous). We constructed multiple regression models using variables that were statistically significant ($p \leq 0.10$) in the bivariate analyses. We tested both personal stigma and stigma concerns as outcomes of the multiple regression models.

Results

The survey was completed by 367 respondents (48.8% male, 51.2% female) (Table 1). The mean age of male and female participants was 41.2 and 37.1 years, respectively ($p = 0.002$). Consistent with the local Latino immigrant population, participants primarily reported their countries of origin as Mexico (36.5%) or Central America (Honduras 19.9%, El Salvador 18.3%, Guatemala 9.5%). Most participants had lived in the U.S. for over 5 years (76.3%). Most participants had less than a 12th grade education (69.8%; 39% had completed 6th grade or less). 74.1% had limited English proficiency, with limited proficiency significantly greater among females (78.2%) than males (69.8%, $p = 0.008$). Less than half of participants reported ever talking to a mental health provider, with females reporting this more than males (41.7% and 24.0%, respectively; $p < 0.001$). Mean depression knowledge score was 11.5 (SD = 2.25), with females demonstrating greater knowledge than males (11.9 and 11.1, respectively, $p = 0.002$; d = -0.322).

Predictors of Personal Stigma

Mean personal stigma score was 18.2 (SD = 5.88), with males demonstrating greater personal stigma than females (19.4 and 17.1, respectively, $p < 0.001$; d = 0.403). Notably, 65.6% of respondents (71.0% of males and 60.6% of

Table 1 Socio-demographic characteristics of depression knowledge and stigma survey respondents, by gender (N = 367)

	Male n (%)	Female n (%)	Total n (%)	p-value
Age (mean, SD)	41.2 (13.4)	37.1 (11.9)	39.1 (12.8)	0.002
Country of Origin				0.040
El Salvador	40 (22.3)	27 (14.4)	67 (18.3)	
Guatemala	18 (10.1)	17 (9.0)	35 (9.5)	
Honduras	42 (23.5)	31 (15.5)	73 (19.9)	
Mexico	55 (30.7)	79 (42.0)	134 (36.5)	
Other	24 (13.4)	34 (18.1)	58 (15.8)	
Time in the US				0.529
5 years or less	45 (25.1)	42 (22.3)	87 (23.7)	
More than 5 years	134 (74.9)	146 (77.7)	280 (76.3)	
English Proficiency				0.008
I do not understand English (or only a few words/phrases)	58 (32.4)	90 (47.9)	148 (40.3)	
I can understand some spoken English	67 (37.4)	57 (30.3)	124 (33.8)	
I understand most spoken English	26 (14.5)	13 (6.9)	39 (10.6)	
I am fluent or near fluent in English	28 (15.6)	28 (14.9)	56 (15.3)	
Education				0.268
6th grade or less	76 (42.4)	67 (35.7)	143 (39.0)	
Some secondary school (grades 7–12)	54 (30.2)	59 (31.4)	113 (30.8)	
Graduated secondary school/high School equivalent	18 (10.1)	33 (17.6)	51 (13.9)	
Technical or vocational school	9 (5.0)	11 (5.9)	20 (5.4)	
Some university	9 (5.0)	8 (4.3)	17 (4.6)	
University graduate	13 (7.2)	10 (5.3)	23 (6.3)	
Religion				0.047
Catholic	83 (46.4)	103 (54.8)	186 (50.7)	
Evangelic/Protestant	67 (37.4)	49 (26.1)	116 (31.6)	
Other	12 (6.7)	22 (11.7)	34 (9.3)	
No religion	17 (9.5)	14 (7.4)	31 (8.4)	
Importance of Religion				0.370
Important or very important	144 (80.4)	144 (76.6)	288 (78.5)	
Somewhat important or not important	35 (19.6)	44 (23.4)	79 (21.5)	
Ever talked to a mental health provider (e.g., therapist, social worker, psychiatrist)				< 0.001
Yes	43 (24.0)	78 (41.7)	121 (33.1)	
No	136 (76.0)	109 (58.3)	245 (66.9)	

females) strongly agreed or agreed that depression was a sign of personal weakness, and just over half (52.3%) (57.0% of males and 47.9% of females) strongly agreed or agreed that people with depression could snap out of it if they wanted to. Respondents also strongly agreed or agreed that people with depression are dangerous (54.7% total; 59.2% of males and 50.6% of females) and unpredictable (60.5% total; 62.5% of males and 58.5% of females). In bivariate analyses, gender, age, education, importance of religion, and depression knowledge were associated with personal stigma. Being female, having a higher education level, and higher depression knowledge were associated with less personal stigma. Being older and feeling that religion is important or very important were associated with higher personal stigma.

Variables associated with personal stigma at $p < 0.10$ (gender, age, education, importance of religion, and depression knowledge) were entered into a multiple regression model (Table 2). The multiple regression model statistically significantly predicted personal stigma scores ($F[5, 334] = 19.15$, $p < 0.001$). Multiple regression analysis revealed that gender ($\beta = -0.14$, $t = -2.82$, $p = 0.005$), education ($\beta = -0.17$, $t = -3.45$, $p < 0.001$), importance of religion ($\beta = 0.14$, $t = 2.85$, $p = 0.005$), and DKM score ($\beta = -0.32$, $t = -6.42$, $p < 0.001$) each contributed unique variance to the prediction of personal stigma scores. Specifically, being male, having an education level less than high school, reporting high importance of religion, and scoring low on the DKM contribute to higher personal stigma scores. When controlling for the other variables, age was no longer a significant predictor of personal stigma.

Table 2 Linear regression analyses for determinants predicting personal stigma

	Unadjusted			Adjusted[e]		
	B	SE	*β*	B	SE	*β*
Gender, female	-2.31	0.6	-0.20[d]	-1.62	0.57	-0.14[b]
Age	0.006	0.003	0.1[a]	0.004	0.003	0.08
Education, high school or greater	-3.47	0.64	-0.27[d]	-2.16	0.63	-0.17[d]
Time in the U.S., more than 5 years	-1.25	0.72	-0.90	--	--	--
Importance of religion, high	2.7	0.9	0.16[c]	2.03	0.81	0.14[b]
Depression knowledge	-1.01	0.13	-0.39[d]	-0.82	0.13	-0.32[d]
				R2 (R2 adjusted)		0.23 (0.22)
				R2 change		0.23
				F change		19.15
				Sig, F change		< 0.001

[a] $p < 0.10$, [b] $p < 0.05$, [c] $p < 0.01$, [d] $p < 0.001$

[e] Variables significant at $p < 0.10$ in the unadjusted analyses were included in the adjusted regression model

Predictors of Stigma Concerns About Mental Health Care

Participants did not demonstrate high stigma concerns about mental health care; mean SCMHC score was 0.41 (SD = 0.85) with no difference between male and female participants. In bivariate analyses age, education, and depression knowledge were associated with stigma concerns about mental health care. Greater depression knowledge and higher education levels were significantly associated with reduced stigma concerns about mental health care. Older age was associated with higher stigma concerns about mental health care.

Variables associated with stigma concerns about mental health care at $p < 0.10$ (age, education, and depression knowledge) were entered into a multiple regression model (Table 3). The multiple regression model statistically significantly predicted stigma concerns about mental health care ($F[3, 367] = 5.29$, $p = 0.001$). Multiple regression analysis revealed that DKM score ($\beta = -0.16$, $t = -3.07$, $p = 0.002$) contributed unique variance to the prediction of higher SCMHC scores. When controlling for the other variables, age and education were no longer significant predictors of stigma concerns about mental health.

Discussion

We present findings of a survey assessing mental health stigma administered to a convenience sample of Latino adults in a newly emerging destination city for Latino immigrants. Stigmatizing beliefs most endorsed by participants included those related to the extent to which a person could control their depression, depression as a personal weakness, and depression causing people to be dangerous or unpredictable. Qualitative studies have shown that Latinos often view depression as a consequence of difficult life circumstances, failing in personal responsibilities, and immigrant-related pressures [29, 31, 51, 52]. Our participants echoed these beliefs regarding personal control of depression which suggest that a person is, at least partially, responsible for the onset and continuation of their depression. Stigmatizing beliefs were particularly prevalent amongst males, those

Table 3 Linear regression analyses for determinants predicting stigma concerns about mental health care

	Unadjusted			Adjusted[e]		
	B	SE	*β*	B	SE	*β*
Gender, female	-0.10	0.09	-0.06	--	--	--
Age	0.001	0	0.10[a]	0.001	0	0.9
Education, high school or greater	-0.17	0.1	-0.09[a]	-0.11	0.1	-0.06
Time in the U.S., more than 5 years	-0.04	0.1	-0.02	--	--	--
Importance of religion, high	0.1	0.13	0.04	--	--	--
Depression knowledge	-0.07	0.02	-0.17[d]	-0.06	0.02	-0.16[c]
				R2 (R2 adjusted)		0.04 (0.03)
				R2 change		0.04
				F change		5.29
				Sig, F change		0.001

[a] $p < 0.10$, [b] $p < 0.05$, [c] $p < 0.01$, [d] $p < 0.001$

[e] Variables significant at $p < 0.10$ in the unadjusted analyses were included in the adjusted regression model

reporting religion as important, and amongst those with lower levels of education and/or depression knowledge.

Consistent with prior studies, reporting religion as important was associated with holding stigmatizing beliefs in our study sample [28, 30, 32]. Uebelacker and colleagues identified *church stigma* as a subtheme of stigma, with Latino focus group participants discussing depression as demonic or diabolical [30]. Similarly, Caplan and colleagues reported that 77% of Latino participants interviewed endorsed "lack of faith in God" as a cause of depression [28]. The relationship between religion and mental health is complex, however. Moreno and Cardemil found that religious attendance among Latinos was negatively associated with lifetime prevalence of depressive disorder, anxiety disorder, and substance use disorder [53]. Indeed, many Latinos seek mental health support from religious leaders, and prefer to receive this help over that from formal mental health providers [53, 54]. As such, religious organizations and leaders may be able to reduce depression stigma and facilitate access to mental health care [54, 55]. In recognition of the role of religion in the lives of communities, both the Substance Abuse and Mental Health Administration (SAMSHA) and the National Organization for Mental Illness (NAMI) have guides for faith leaders to use in in hosting discussions regarding mental health (care) with their congregants [56, 57].

In light of mental health stigma, lack of health insurance, and limited mental health provider access, it is notable that 41.7% of the women in our study reported ever having spoken with a mental health provider (broadly defined). Possible explanations include that the sample included parents who interacted with social workers or therapists in the context of their children's schools, medical, or mental health appointments or in the context of their own routine prenatal care and delivery.

Another venue in which to address barriers to mental health care-seeking is primary care. In our sample, participants did not demonstrate high stigma concerns about mental health care despite high rates of stigmatizing beliefs about depression and people with depression. Specifically, there was little stigma expressed with respect to disclosing personal experiences with depression to providers or seeking medical care for depression. Latinos are more likely to prefer addressing mental health concerns in primary care [58]; however, there are challenges to the receipt of mental health care within the primary care setting. Primary care providers may face difficulties in diagnosing depression among Latinos, who are more likely to emphasize somatic complaints than their non-Hispanic counterparts [10, 59]. In an effort to overcome this barrier, Bedoya et al. randomized primary care clinics to a culturally-focused psychiatry consultation service, e.g. 2 sessions with a psychiatrist or psychologist, or usual care and found that consultation service participants had greater reductions in depressive symptoms [60].

Efforts to improve access to and quality of mental health care must be paralleled by ongoing public health efforts to improve knowledge about depression, reduce depression stigma, and promote seeking care for depression [61]. This survey was a key component of a 3-year project to improve the acceptability and availability of care for depression for immigrant Latinos in Baltimore. To address project goals, we assembled a strategic network of Latino immigrants, Latino-serving organizations, healthcare providers, payors, and researchers which has guided all project activities. Survey results were shared with network subcommittees for feedback and discussions culminating in the design and dissemination of a Spanish language, multi-media campaign to reduce mental health stigma in Baltimore (fortalecebaltimore.org). The survey could be used in the future by our team or others to obtain a baseline with which to measure the effectiveness of future interventions to reduce depression stigma in Latino immigrant communities and/or to provide guidance on messaging priorities for such campaigns.

Our study had several limitations. Due to the sample size, we are unable to explore differences based on country of origin, which can influence depression experiences, mental health stigma beliefs, and mental healthcare-seeking behaviors [61–63]. Also, although importance of religion was an important predictor of personal stigma, we are not able to explore differences based on religious affiliation. The cross-sectional design limits the ability to make causal associations. We conducted the survey using Qualtrics survey software with embedded audio files; similar technology has been shown to improve response rates and increased reporting of certain behaviors [64, 65], but there is potential for social desirability bias. Given that the target population does not have a sampling frame, we were not able to calculate a traditional response rate. Finally, this survey was conducted primarily among foreign-born Latinos living in Baltimore, and our findings may not be generalizable to Latino populations in other areas. However, our results may be relevant to other urban areas with rapidly growing immigrant Latino communities.

New Contributions to the Literature

The COVID-19 pandemic has worsened the mental wellbeing of Latinos in the U.S. [66–68]; addressing the unmet mental health needs of Latino immigrants is of timely importance. Given the many ramifications of mental health stigma, it is vital for public health practitioners to monitor stigma beliefs to tailor interventions to particular subgroups (e.g. males, religious individuals). Importantly, though, there was little stigma expressed with respect to disclosing

personal experiences with depression to providers or seeking medical care for depression. Our findings support simultaneous and ongoing efforts to address mental health stigma and expand access to mental health care.

References

1. Fortuna LR, Porche MV, Alegria M. Political violence, psychosocial trauma, and the context of mental health services use among immigrant Latinos in the United States. Ethn health. 2008;13(5):435–63.
2. Garcini LM, Murray KE, Zhou A, Klonoff EA, Myers MG, Elder JP. Mental health of undocumented immigrant adults in the United States: a systematic review of methodology and findings. J Immigr Refug Stud. 2016;14(1):1–25.
3. Becerra D, Hernandez G, Porchas F, Castillo J, Nguyen V, Perez González R. Immigration policies and mental health: examining the relationship between immigration enforcement and depression, anxiety, and stress among latino immigrants. J Ethn Cult Divers Soc Work. 2020;29(1–3):43–59.
4. Ornelas IJ, Yamanis TJ, Ruiz RA. The health of undocumented latinx immigrants: what we know and future directions. Annu Rev Public Health. 2020;41:289–308.
5. Jolie SA, Onyeka OC, Torres S, DiClemente C, Richards M, Santiago CD. Violence, place, and strengthened space: a review of immigration stress, violence exposure, and intervention for immigrant latinx youth and families. Annu Rev Clin Psychol. 2021;17:127–51.
6. Gresenz CR, Derose KP, Ruder T, Escarce JJ. Health care experiences of Hispanics in new and traditional US destinations. Med Care Res Rev. 2012;69(6):663–78.
7. Kiang L, Grzywacz JG, Marín AJ, Arcury TA, Quandt SA. Mental health in immigrants from nontraditional receiving sites. Cult Divers Ethn Minor Psychol. 2010;16(3):386–94.
8. Harris CT, Feldmeyer B. Latino immigration and White, Black, and latino violent crime: a comparison of traditional and non-traditional immigrant destinations. Soc Sci Res. 2013;42(1):202–16.
9. Cobb CL, Martinez CR Jr, Isaza AG, McClure HH, Eddy JM. Linking acculturation factors, family environments, and mental health outcomes among latino families in traditional, emerging, and crisis immigrant receiving contexts in the United States. In: Nagayama Hall GC, editor. Mental and behavioral health of immigrants in the United States. Cambridge, Massachusetts: Academic Press; 2020. pp. 3–24.
10. Bucay-Harari L, Page KR, Krawczyk N, Robles YP, Castillo-Salgado C. Mental health needs of an emerging latino community. J Behav Health Serv Res. 2020;47(3):388–98.
11. Cuijpers P, Quero S, Dowrick C, Arroll B. Psychological treatment of depression in primary care: recent developments. Curr Psychiatry Rep. 2019;21(12):1–10.
12. Garcia ME, Hinton L, Gregorich SE, Livaudais-Toman J, Kaplan C, Karliner L. Unmet mental health need among chinese and latino primary care patients: intersection of ethnicity, gender, and English proficiency. J Gen Intern Med. 2020;35(4):1245–51.
13. Ortega AN, McKenna RM, Pintor JK, Langellier BA, Roby DH, Pourat N, Bustamante AV, Wallace SP. Health care access and physical and behavioral health among undocumented Latinos in California. Med Care. 2018;56(11):919–26.
14. Sentell T, Shumway M, Snowden L. Access to mental health treatment by English language proficiency and race/ethnicity. J Gen Intern Med. 2007;22(2):289–93.
15. Tran LD, Ponce NA. Who gets needed mental health care? Use of mental health services among adults with mental health need in California. Calif J Health Promot. 2017;15(1):36–45.
16. Delara M. Social determinants of immigrant women's mental health. Adv Public Health. 2016: 9730162.
17. Green JG, McLaughlin KA, Fillbrunn M, Fukuda M, Jackson JS, Kessler RC, Sadikova E, Sampson NA, Vilsaint C, Williams DR, Cruz-Gonzalez M. Barriers to mental health service use and predictors of treatment drop out: Racial/ethnic variation in a population-based study. Admin Policy Mental Health. 2020;47(4):606–16.
18. Artiga S, Diaz M. Health Coverage and Care of Undocumented Immigrants. San Francisco: Kaiser Family Foundation; 2019.
19. Hamp A, Stamm K, Lin L, Christidis P. 2015 Survey of Psychology Health Service Providers. Washington, D.C.: American Psychological Association; 2016.
20. Lagomasino IT, Dwight-Johnson M, Miranda J, Zhang L, Liao D, Duan N, Wells KB. Disparities in depression treatment for Latinos and site of care. Psychiatr Serv. 2005;56(12):1517–23.
21. Quiñones AR, Thielke SM, Beaver KA, Trivedi RB, Williams EC, Fan VS. Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression. Psychiatr Serv. 2014;65(2):193–200.
22. Olfson M, Marcus SC, Tedeschi M, Wan GJ. Continuity of antidepressant treatment for adults with depression in the United States. Am J Psychiatry. 2006;163(1):101–8.
23. Warden D, Rush AJ, Wisniewski SR, Lesser IM, Kornstein SG, Balasubramani GK, Thase ME, Preskorn SH, Nierenberg AA, Young EA, Shores-Wilson K. What predicts attrition in second step medication treatments for depression?: a STAR* D report. Int J Neuropsychopharmacol. 2009;12(4):459–73.
24. Ahmedani BK. Mental health stigma: society, individuals, and the profession. J Soc Work Values Ethics. 2011;8(2):4–1.
25. Goffman E. Stigma: notes on the management of spoiled identity. New York: Simon and Schuster; 2009.
26. Parker R, Aggleton P. HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. Soc Sci Med. 2003;57(1):13–24.
27. Murthy RS. Stigma of mental illness in the third world. In: Okasha A, Stefanis CN, editors. Perspectives on the Stigma of Mental Illness. Cairo: World Psychiatric Association; 2005.
28. Caplan S, Escobar J, Paris M, Alvidrez J, Dixon JK, Desai MM, Scahill LD, Whittemore R. Cultural influences on causal beliefs about depression among latino immigrants. J Transcult Nurs. 2013;24(1):68–77.
29. Martínez Pincay IE, Guarnaccia PJ. It's like going through an earthquake": anthropological perspectives on depression among latino immigrants. J Immigr Minor Health. 2007;9(1):17–28.
30. Uebelacker LA, Marootian BA, Pirraglia PA, Primack J, Tigue PM, Haggarty R, Velazquez L, Bowdoin JJ, Kalibatseva Z, Miller IW. Barriers and facilitators of treatment for depression in a latino community: a focus group study. Community Ment Health J. 2012;48(1):114–26.
31. Vargas SM, Cabassa LJ, Nicasio A, De La Cruz AA, Jackson E, Rosario M, Guarnaccia PJ, Lewis-Fernández R. Toward a cultural adaptation of pharmacotherapy: latino views of depression and antidepressant therapy. Transcult Psychiatry. 2015;52(2):244–73.
32. Caplan S. Intersection of cultural and religious beliefs about mental health: Latinos in the faith-based setting. Hisp Health Care Int. 2019;17(1):4–10.
33. Wu IH, Bathje GJ, Kalibatseva Z, Sung D, Leong FT, Collins-Eaglin J. Stigma, mental health, and counseling service use: a person-centered approach to mental health stigma profiles. Psychol Serv. 2017;14(4):490–501.
34. Washburn M, Brewer K, Gearing R, Leal R, Yu M, Torres L. Latinos' conceptualization of depression, diabetes, and

mental health–related stigma. J Racial Ethn Health Disparities. 2022;9(5):1912–22.
35. Abdullah T, Brown TL. Mental illness stigma and ethnocultural beliefs, values, and norms: an integrative review. Clin Psychol Rev. 2011;31(6):934–48.
36. Lindinger-Sternart S. Help-seeking behaviors of men for mental health and the impact of diverse cultural backgrounds. Int J Soc Sci Stud. 2015;3(1):1–6.
37. Vega WA, Rodriguez MA, Ang A. Addressing stigma of depression in latino primary care patients. Gen Hosp Psychiatry. 2010;32(2):182–91.
38. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, Morgan C, Rüsch N, Brown JS, Thornicroft G. 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.
39. Lanouette NM, Folsom DP, Sciolla A, Jeste DV. Psychotropic medication nonadherence among United States Latinos: a comprehensive literature review. Psychiatr Serv. 2009;60(2):157–74.
40. Link BG, Phelan JC, Bresnahan M, Stueve A, Pescosolido BA. Public conceptions of mental illness: labels, causes, dangerousness, and social distance. Am J Public Health. 1999;89(9):1328–33.
41. Rawlings-Blake S, Barbot O. The Health of Latinos in Baltimore City 2011. Baltimore: Baltimore City Health Department; 2011.
42. Negi NJ, Forrester P, Calderon M, Esser K, Parrish D. We are at full Capacity": social care workers persisting through work-related stress in a new immigrant settlement context in the United States. Health Soc Care Community. 2019;27(5):e793–801.
43. Leite L, Buresh M, Rios N, Conley A, Flys T, Page KR. Cell phone utilization among foreign-born Latinos: a promising tool for dissemination of health and HIV information. J Immigr Minor Health. 2014;16(4):661–9.
44. Griffiths KM, Christensen H, Jorm AF, Evans K, Groves C. Effect of web-based depression literacy and cognitive–behavioural therapy interventions on stigmatising attitudes to depression: Randomised controlled trial. Br J Psychiatry. 2004;185(4):342–9.
45. Unger JB, Cabassa LJ, Molina GB, Contreras S, Baron M. Evaluation of a fotonovela to increase depression knowledge and reduce stigma among hispanic adults. J Immigr Minor Health. 2013;15(2):398–406.
46. Griffiths KM, Bennett K, Walker J, Goldsmid S, Bennett A. Effectiveness of MH-Guru, a brief online mental health program for the workplace: a randomised controlled trial. Internet Interv. 2016;6:29–39.
47. Sanchez K, Eghaneyan BH, Trivedi MH. Depression screening and education: options to reduce barriers to treatment (DESEO): protocol for an educational intervention study. BMC Health Serv Res. 2016;16(1):1–9.
48. Lopez V, Sanchez K, Killian MO, Eghaneyan BH. Depression screening and education: an examination of mental health literacy and stigma in a sample of hispanic women. BMC Public Health. 2018;18(1):1–8.
49. Caplan S. A pilot study of a novel method of measuring stigma about depression developed for Latinos in the faith-based setting. Community Ment Health J. 2016;52(6):701–9.
50. Interian A, Ang A, Gara MA, Link BG, Rodriguez MA, Vega WA. Stigma and depression treatment utilization among Latinos: Utility of four stigma measures. Psychiatr Serv. 2010;61(4):373–99.
51. Cabassa LJ. Latino immigrant men's perceptions of depression and attitudes toward help seeking. Hispanic J Behav Sci. 2007;29(4):492–509.
52. Cabassa LJ, Lester R, Zayas LH. It's like being in a labyrinth:" hispanic immigrants' perceptions of depression and attitudes toward treatments. J Immigr Minor Health. 2007;9(1):1–6.
53. Moreno O, Cardemil E. The role of religious attendance on mental health among mexican populations: a contribution toward the discussion of the immigrant health paradox. Am J Orthopsychiatry. 2018;88(1):10–5.
54. Villatoro AP, Morales ES, Mays VM. Family culture in mental health help-seeking and utilization in a nationally representative sample of Latinos in the United States: the NLAAS. Am J Orthopsychiatry. 2014;84(4):353–63.
55. Villatoro AP, Dixon E, Mays VM. Faith-based organizations and the Affordable Care Act: reducing latino mental health care disparities. Psychol Serv. 2016;13(1):92–104.
56. Substance Abuse and Mental Health Administration Faith-Based and Community Initiatives. ; 2022. Available: https://www.samhsa.gov/faith-based-initiatives.
57. National Organization for Mental Illness. (n.d.). NAMI FaithNet. https://www.nami.org/Get-Involved/NAMI-FaithNet.
58. Cabassa LJ, Zayas LH, Hansen MC. Latino adults' access to mental health care: a review of epidemiological studies. Admin Policy Mental Health. 2006;33(3):316–30.
59. Angel R, Guarnaccia PJ. Mind, body, and culture: somatization among Hispanics. Soc Sci Med. 1989;28(12):1229–38.
60. Bedoya CA, Traeger L, Trinh NH, Chang TE, Brill CD, Hails K, Hagan PN, Flaherty K, Yeung A. Impact of a culturally focused psychiatric consultation on depressive symptoms among Latinos in primary care. Psychiatr Serv. 2014;65(10):1256–62.
61. Martinez Tyson D, Arriola NB, Corvin J. Perceptions of depression and access to mental health care among latino immigrants: looking beyond one size fits all. Qual Health Res. 2016;26(9):1289–302.
62. González HM, Tarraf W, Whitfield KE, Vega WA. The epidemiology of major depression and ethnicity in the United States. J Psychiatr Res. 2010;44(15):1043–51.
63. Wassertheil-Smoller S, Arredondo EM, Cai J, Castaneda SF, Choca JP, Gallo LC, Jung M, LaVange LM, Lee-Rey ET, Mosley T Jr, Penedo FJ. Depression, anxiety, antidepressant use, and cardiovascular disease among hispanic men and women of different national backgrounds: results from the Hispanic Community Health Study/Study of Latinos. Ann Epidemiol. 2014;24(11):822–30.
64. Tourangeau R, Smith TW. Asking sensitive questions: the impact of data collection mode, question format, and question context. Public Opin Q. 1996;60(2):275–304.
65. Newman JC, Des Jarlais DC, Turner CF, Gribble J, Cooley P, Paone D. The differential effects of face-to-face and computer interview modes. Am J Public Health. 2002;92(2):294–7.
66. McKnight-Eily LR, Okoro CA, Strine TW, Verlenden J, Hollis ND, Njai R, Mitchell EW, Board A, Puddy R, Thomas C. Racial and ethnic disparities in the prevalence of stress and worry, mental health conditions, and increased substance use among adults during the COVID-19 pandemic—United States, April and May 2020. MMWR Morb Mortal Weekly Report. 2021;70(5):162–6.
67. Gomez-Aguinaga B, Dominguez MS, Manzano S. Immigration and gender as social determinants of mental health during the COVID-19 outbreak: the case of US Latina/os. Int J Environ Res Public Health. 2021;18(11):6065.
68. Saltzman LY, Lesen AE, Henry V, Hansel TC, Bordnick PS. COVID-19 mental health disparities. Health Secur. 2021;19(S1):5–S13.