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Barriers to and Correlates of Retention in Behavioral Health Treatment among Latinos in Two Different Host Countries: U.S. and Spain

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Abstract

Context—Latino immigrants constitute a large portion of the Spanish and U.S. immigrant populations, yet a dearth of research exists regarding barriers to retention in behavioral health care.

Objectives—To identify and compare perceived barriers related to behavioral health care among first and second generation Latinos in Boston, Madrid, and Barcelona, and evaluate whether the frequency of behavioral health care use in the last year was related to these barriers.

Design, Setting and Participants—Data come from the International Latino Research Partnership project. First or second generation self-identified Latino immigrants ages 18+ who resided more than one year in the host country were recruited from community agencies and primary care, mental health, substance abuse, and HIV clinics.

Main Outcome Measures—Eleven barriers were assessed and compared across sites. The relationship between barriers and behavioral services visits within the last year was evaluated, adjusting for socio-demographics, clinical measures, degree of health literacy, cultural and social factors.

Results—Wanting to handle the problem on one's own, thinking that treatment would not work, and being unsure of where to go or who to see were the most frequently reported barriers for Latino immigrants. Previous treatment failure, difficulties in transportation or scheduling, and linguistic barriers were more likely to be reported in Boston; trying to deal with mental health problems on one's own was more commonly reported in Barcelona and Madrid. Two barriers

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associated with number of visits were concerns about the cost of services and uncertainty about where to go or who to see.

Conclusions—After adjusting for socio-demographics, clinical measures, degree of health literacy, cultural and social factors, barriers still differed significantly across sites. Efforts to improve behavioral health services must be tailored to immigrants' context, with attention to changing attitudes of self-reliance and outreach to improve access to and retention in care.

Keywords

barriers; Latinos; immigrants; behavioral health; ethnic; international; cross-national

Introduction

Latinos constitute the largest, fastest-growing immigrant population in the United States[1] and represent around 20% of the total immigrant population in Spain.[2, 3] The growth of Latino populations, defined as first and second generation self-identified Latinos in both countries, poses challenges for public health systems, from accessibility of behavioral health services[4, 5] to low quality and lack of continuity of care.[6] While disparities in behavioral health care among Latinos have been identified for Latinos in the U.S.[7, 8] , there is a paucity of research in both countries that identifies the barriers related to retention in care for Latinos and whether these barriers vary depending on the host country.[9] Consequently, progress has been limited[10, 11], with insufficient early detection and intervention and inadequate access to treatment, resulting in a public health problem.[12]

Perceived barriers to behavioral health treatment can be identified at the individual/attitudinal and structural/systemic levels.[13-16] Attitudinal barriers among Latinos include cultural mistrust of the mental health system[17, 18], desire to handle the problem on one's own[19] and perceived discrimination by health care providers.[20, 21] Structural barriers among Latinos include lack of ethnic/racial match between patient and provider[20, 22] , lack of health insurance, low socioeconomic status[13, 23] , low English proficiency[24, 25] , lack of transportation, difficulties in scheduling appointments, lack of child care, inability to take time off from work, and limited educational attainment.[20, 23, 26-28] Culturally associated stigma or the so called “double stigma” is also highly associated with reported barriers to retention to mental health-care among Latinos and other immigrant groups. [29, 30] Factors related to acculturation like sense of belonging within the context one resides, family support, ethnic identity, acculturative stress and perceived discrimination have also been identified as potential barriers to care.[31, 32] The ability to identify barriers to care provision can help ensure early identification of co-occurring substance use/smoking and mental health problems and detection of HIV risk in primary care clinics, thus advancing the public health goal of detection and treatment.

Rationale for the Study

The aims of this study were: 1) to identify and compare perceived barriers to retention in behavioral health care among Latinos in Boston, Madrid and Barcelona who had received or were receiving treatment; 2) to identify clinical, cultural and social factors as correlates to

these barriers and 3) to understand whether the frequency of behavioral health care use in the last year was related to the reported barriers to care.

Site differences in Health care

The Latino population in the U.S. is diverse, with large numbers of Puerto Ricans, Dominicans, Brazilians, Salvadorans, and Mexicans, among others. Since the Patient Protection and Affordable Care Act of 2010 (PPACA), health insurance coverage has increased for legal residents through partially and fully subsidized insurance plans. However, undocumented immigrants and persons with less than five years of legal residence cannot receive federal insurance subsidies or enroll in Medicaid (a social health care program for low-income individuals). The main entrance for Latino immigrants to the health care system is through community-based clinics where patients can choose a primary care doctor that accepts public insurance and either treats or refers them to mental health and substance abuse care. Although Massachusetts has the highest insurance coverage in the nation[33], barriers in the process of care seem to remain.

In Spain, Latino immigrants come mostly from Ecuador, Colombia and Bolivia.[34] Though Spain has universal coverage for primary care, specialty care, and prescription drugs[35], a law denying health coverage to undocumented immigrants was instituted in 2012. However, the law has not been fully applied and effects of its implementation are still unknown. Similar to Massachusetts, the main entrance to the health care system is through primary care centers, where each person has an assigned primary care provider. In Barcelona, primary care providers are assigned according to the client's address. Each primary care center has an assigned general hospital and behavioral health center. In Madrid, any person can chose their primary care provider and specialty hospital of reference regardless of their home address. In both Barcelona and Madrid, primary care providers are responsible for referring patients to mental health care centers. Specialty providers in mental health centers classify referrals and provide appointments according to severity, while substance abuse treatment is open to all registered persons in the municipality.

Methods

Study Setting and Sample

Data were drawn from survey interviews for the International Latino Research Partnership project, a multisite study funded by the National Institute on Drug Abuse that seeks to improve Latino behavioral health. Participants (n=567), were recruited from primary care, mental health, substance abuse, and HIV clinics, as well as from community agencies. Clinics in both countries were associated with large safety-net health care systems. Study activities were conducted between July 2013 and August 2014. The study was approved by the review boards of the participating institutions. All participants provided written, informed consent prior to participating in the study (see Table 1s. in supplemental digital content for patients' demographics). For our analyses, eligible participants met inclusion criteria if they were 18 years of age or older and self-identified as first or second generation Latinos (from any Spanish-speaking Caribbean, Central, or South American country) who had stayed more than one year in the host country and that in the last year had received

behavioral health services in the host country by either getting a prescription, being hospitalized for behavioral health problems, or having received psychotherapy (n=281).

Procedures

Prospective participants were contacted directly by research team members in clinic waiting rooms or were referred to the ILRP research team by agency staff and then contacted over the phone. Interviews, administrated by trained interviewers, were conducted in Spanish (n=276) or English (n=5) depending on participant language preference and were audio recorded, lasting around one hour (Mean=68.2 min, SD=21.6 min). Participants were compensated with $40/30 € gift cards.

Measures

Barriers to care—To assess perceived barriers in behavioral health care, we asked participants about eleven potential barriers they might have experienced tied to behavioral health services. Barriers were divided into attitudinal (related to the individual's feelings and values) and structural (related to the health care system). Attitudinal barriers included wanting to handle a problem on one's own, thinking treatment would not work, concerns about stigmatization, fear of involuntary hospitalization, and concerns about poor treatment due to one's ethnic/racial background. Structural barriers included not knowing where to go or with whom to talk about problems, fear of not knowing how to communicate problems due to language barriers, previous negative experiences with treatment, treatment cost, and problems with transportation and scheduling times. Participants answered “yes” or “no” to indicate if they had experienced each of the barriers and had the opportunity to add additional barriers they faced not described in the assessment. To assess behavioral service utilization, we constructed a continuous variable of number of days of hospital stays for mental health or substance abuse problems and number of visits for psychological counseling or psychiatry lasting 30 minutes or more in the last year. Detailed information about the sources of the measures used, including measures on social and cultural factors, use of services and clinical factors, health literacy, and demographic questions can be found in the appendix.[36-47]

Statistical Analysis

We first investigated the distributions of socio-demographics, clinical measures, cultural, and social factors at each site. We reported proportions for categorical variables and mean and standard deviation for the continuous variables. We relied on regressions to detect any significant site differences in barriers to care. Model coefficients represented the pairwise comparison to the referent Boston site and comparisons between Spanish sites. The p-values from the regression indicated whether there were significant differences relative to the referent site for each barrier.

To address missing data in the variables of interest (less than 6% missing on barrier measures; less than 3% in clinical measures[1], cultural/social factors and socioeconomic status variables), we implemented multiple imputation methods using the mi procedure in Stata.[48] This technique creates twenty complete datasets, imputes missing values using a chained equations approach, analyzes each dataset, and uses standard rules to combine

estimates and adjust standard errors for uncertainty due to imputation. To address the missing data in DAST component, we performed a sensitivity analysis, excluding missing DAST data from the model analysis.

We adopted logistic regressions to further detect site differences for individual barriers after controlling for other confounding predictors. We used Poisson regressions to assess whether number of barriers differed for individuals at different sites. Multiple model specifications were adopted for consistent estimation. Finally, we applied Poisson regression with multiple model specifications to identify if barriers were associated with the number of visits to behavioral health services in the past 12 months.

Results

Table 1s. summarizes individual characteristics of the sample. Out of a total of 567 persons included in the ILRP project, 281 fulfilled the inclusion criteria for this study. All participants from Spain were first generation immigrants, while a third of the Boston participants were second generation. Participants from Madrid and Barcelona were similar to participants from Boston in gender distribution, racial/ethnic composition, and economic status, but not age, with Boston participants being older than those from Spain (Boston vs. Madrid P=0.002, Boston vs. Barcelona P<0.001). All three sites were similar in terms of clinical measures, except that participants from Madrid and Barcelona were more likely to have lower PTSD symptoms (Boston vs. Madrid P<0.05, Boston vs. Barcelona P=0.08), higher alcohol abuse (Boston vs. Madrid P<0.001, Boston vs. Barcelona P<0.001), and higher health literacy (Boston vs. Madrid P<0.001, Boston vs. Barcelona P=0.002) than participants from Boston. Participants in Boston had longer residence in the host country with a mean residency of 27 years. Once the second generation immigrants are excluded from the analysis, this mean is reduced to 25 years. Participants in Boston also experienced a higher degree of discrimination, and reported stronger ethnic identity and a greater sense of belonging than their Barcelona and Madrid counterparts. Compared to Boston, Madrid and Barcelona had a lower share of recruitment from primary care clinics and a higher proportion of patients in clinics specialized for substance abuse treatment.

Table 1 presents the prevalence of individual barriers at each study site. The most prevalent barriers were the desire to handle a problem on one's own (64-54%), thinking that treatment would not work (40-45%), and being unsure of where to go or who to see (48-44%). Structural barriers like transportation or scheduling problems were identified as more problematic in Boston than in Madrid or Barcelona (Boston vs. Madrid P<0.05, Boston vs. Barcelona P<0.01). A third of the participants from Boston acknowledged linguistic barriers, while fewer than 10% reported this barrier in Madrid or Barcelona. Significant site differences were found regarding fear of involuntary hospitalization (Boston vs. Madrid P<0.05, Boston vs. Barcelona P<0.01 respectively) and concerns about unfair treatment due to ethnic background (Boston vs. Madrid P<0.05, Boston vs. Barcelona P=0.097).

[1]The only exception is DAST which has 29% missing data in the analytical sample. We imputed DAST scores for a subset of patients who did not receive the full DAST module due to skip patterns in the questionnaire. This includes participants who reported use of one or more substances elsewhere in the survey but who skipped out of the full DAST module.

After adjusting for socio-demographics, clinical measures, degree of health literacy and cultural and social factors, reports of certain barriers still differed significantly across sites. Table 2s. in supplemental digital content reports odds ratios and each column presents separate models for specific barriers. Column 2 shows that participants from Madrid and Barcelona were two to three times more likely than their Boston counterparts to report dealing with mental health problems on their own. The next six columns demonstrate that participants from Boston had much higher odds of encountering the following two barriers: difficulties in transportation or scheduling, and linguistic barriers in communication. Linguistic barriers were significantly more common for participants with higher scores on inadequate health literacy and higher perceived discrimination scores.

After controlling for confounding factors such as sociodemographics, clinical profile, and cultural and social factors (presented in Table 3s. in supplemental digital content) we found no significant site differences in presence of multiple barriers. Our full model (i.e. Model 3) shows that females were more likely to experience multiple barriers as compared to males. Age had a negative correlation with number of barriers, with younger patients reporting more barriers to care than their older counterparts. Additionally, those with higher symptoms of depression reported more barriers to care.

Table 4s., presented in supplemental digital content, illustrates how service use in the past 12 months is associated with demographic, cultural and social factors as well as with the reported barriers. One perceived barrier associated with less service use was concern about the cost of services. Paradoxically, uncertainty about where to go or who to see was significantly related to increased use of services. Significantly less service use was found among participants from Madrid and Barcelona relative to those from Boston after adjusting for multiple confounding factors and barriers in care. From the sensitivity analysis that excluded missing DAST data, we observed that the results remained unchanged except for the financial barrier, which became insignificant in Models 2 and 3.

Discussion

To our knowledge, this is one of the few published studies that comprehensively examine perceived barriers associated with retention in behavioral health treatment among Latinos in two host countries. Out of eleven barriers, handling the problem on one's own or self-reliance, doubts about the efficacy of treatment, and uncertainty about where to go or who to see for treatment were reported most frequently at all three sites. Desire to handle the problem on one's own was reported more frequently by younger, female participants and those who migrated recently and had a high ethnic identity. These associations are consistent with other studies that suggest higher levels of ethnic identity, Spanish-language usage, preference for social interactions with other Latinos, and recent migration predict lower access and service utilization.[12, 49-53] Consistent with the literature, Latino young adults avoid care, search for informal care by going to family members, or use home remedies and traditional healers.[53-55] Consequently, outreach campaigns that emphasize when professional behavioral services are warranted could facilitate earlier entrance into care among immigrant populations as a public health intervention. However, more research is

needed to understand the types of public health messages that might encourage people to see the benefits and perils of self-reliance when behavioral health problems are exacerbated.

Lack of trust in treatment and in the behavioral health system along with experiences of discrimination from health care providers are additional contributing factors that lower access and retention in treatment among Latinos.[53, 56] Implementing screening interventions by trained community health workers in community settings could reduce mistrust in treatment and accelerate the public health goal of early detection and engagement in care.

Uncertainty about where to go or who to see for mental health service was a structural barrier reported by many participants at the three sites, underscoring the importance of dissemination of service options to primary care providers and community agencies that serve immigrant populations, with walk-in options to access care. The finding that females are more likely to report more barriers to care than their male counterparts suggests the importance of tailoring services to take into account the multiple roles women have that reduce their opportunities for self-care.[57] Other settings, like Latino common workplaces, should be tested for such outreach. Culturally sensitive programs or patient navigators that educate patients on navigating the health system could also improve access to and retention in care. Once patients begin receiving services, providers should assess perceived barriers and focus on practical solutions. Motivational and psychoeducational interviewing techniques could be used to engage, reassure, and encourage patients to overcome perceived barriers while improving treatment adherence.[58]

Differences by site

Latinos from Spain, who were more likely to be recent immigrants, reported significantly higher rates of wanting to handle problems on their own than those in Boston. This barrier also reflects the double stigma concept reported in the literature regarding immigrant populations.[29, 30] Moreover, recent immigrants could be less targeted by outreach and health awareness campaigns, particularly in Spain, where it is assumed that Latinos do not face linguistic or insurance barriers. This overlooks cultural differences that may contribute to barriers to treatment. We recommend that providers in Spain pay specific attention to attitudinal factors such as self-reliance that could interfere with care.

Boston participants, who reported more difficulties accessing transportation to attend and schedule their appointments, may confront less affordable public transportation systems than in Madrid and Barcelona.[59, 60] Moreover, higher rates of employment in Boston may mean that a greater number of participants had difficulty leaving work to attend appointments. Research suggests that structural factors like financial costs, time off from work, and transportation are significant reasons that Latinos leave therapy.[61] This suggests alternative services like telemedicine or phone therapy could help with these barriers. Fear of involuntary hospitalization was reported by almost half of the participants in Boston, significantly more than in Spain (30%). Coercive treatment experiences have been proven to deter voluntary help seeking.[62] These differences may be due to the link between mental health and the criminal justice system in U.S., where there is an important interplay between criminal justice and mental health.[63-65] Alternatives to incarceration are urgently needed to mitigate this barrier.[66]

While Latinos in Boston more commonly reported linguistic barriers, a small number of Latinos in Barcelona reported linguistic barriers, probably due to the use of Catalan by their providers in Eastern Spain. Currently, the lack of linguistic resources in health care settings is a major barrier in the United States.[67] Inability to communicate mental health concerns can interfere with the diagnostic process, impair patient education, decrease compliance and follow-up, and result in patient dissatisfaction.[68-70] In fact, patient-provider language match may be positively related to patients' retention in treatment, longer length of treatment[71], and reduced waiting time for entering treatment.[72] Perception or anticipation of a linguistic barrier during the first contact with health professionals could discourage individuals from seeking care.[73]

Correlates of services use

After adjusting for multiple confounding factors, significantly lower odds of service use were found among participants in Madrid and Barcelona relative to Boston despite the existence of universal health care and more readily available transportation systems in Spain. The Latino population in Spain has a more recent immigration history with a high prevalence of irregular residential status and less citizenship, which could contribute to lower inclination to seek services compared to Boston, where 72% of participants had achieved citizen status. Low health literacy was also found to be significantly related to lower service utilization. These results highlight the importance of increasing mental health psychoeducation among Latinos to address concerns about treatment and stigma and emphasize how negative consequences could be avoided by early entrance into care.

The number of visits for behavioral health services over a 12-month period was associated with two perceived structural barriers: financial concerns about services and lack of knowledge about where to go or who to see to get services, which was, interestingly, associated with a higher use of services. Not knowing where to go or who to see could not only delay treatment, but could ultimately result in longer treatment due to a more severe clinical profile.[74]

Limitations

This study has several limitations. First, the study included Latinos already accessing health services, with other barriers being more prevalent among those without of any contact with the health care system. While our analysis controls for many factors that differed between sites, the Latino populations across the three sites vary in terms of country of origin and representation of Latino subgroups. There could be underlying differences in attitudes about seeking mental health care between subgroups that might contribute to the observed differences between sites. It should be noted that regarding the statistical analysis, a sensitivity analysis indicated that the inclusion of missing DAST data changed the significance of only one barrier. Finally, at this time of this study, information on participants' response rate was not being recorded. Consequently, we do not have information about the percentage of people willing to respond to the interview relative to the total number of Latinos attending each clinic. Nonetheless, we contacted approximately 46 different clinics and community associations, and thus reached a large proportion of the Latino community at each of the three sites. Notwithstanding these limitations, the study

offers fruitful information about the importance of tailoring outreach to context when addressing barriers to care.

Conclusion

Educational campaigns, use of peer navigators, and prevention programs targeting Latino's self-reliant attitudes about behavioral health care may increase initiation and reduce attrition from mental health treatment.[55] There are differences between the barriers reported among Latino immigrants in Barcelona, Madrid and Boston after controlling for demographic and clinical variables. Efforts to improve entry and retention in behavioral health services like improving access to public transportation, scheduling flexibility, improving educational campaigns about services, and increasing Spanish-speaking care providers' availability are critical to improve treatment retention in Latino populations.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Frequencies of Individual Barrier By Site (n=281)

Individual Barrier:	Boston (n=111)		Madrid (n=67)		P-value	Barcelona (n=103)		P-value
	n	%	n	%	(Madrid vs. Boston)	n	%	(Barcelona vs. Boston)
Attitudinal Barriers								
Want to handle the problem on your own	62	56%	43	64%	0.315	66	64%	0.228
Think the treatment wouldn't work	45	40%	27	41%	0.982	46	45%	0.517
Received treatment before and it didn't work	35	32%	9	14%	0.009	32	31%	0.921
Concerned about how much money it would cost	36	33%	21	32%	0.926	48	46%	0.049
Concerned about what people would think if they found out you were in treatment	39	35%	27	40%	0.539	41	40%	0.441
Structural Barriers								
Have problems with things like transportation or scheduling	57	52%	21	31%	0.011	34	33%	0.005
Unsure about where to go or who to see	49	44%	32	48%	0.597	46	45%	0.890
Scared of being put in a hospital against your will	54	49%	20	29%	0.014	31	30%	0.006
Concerned that you could be treated unfairly because of your race or ethnic background	38	34%	11	17%	0.016	25	24%	0.097
Think oneself might not be able to communicate because of linguistic barriers	35	32%	0	0%	<0.001	10	10%	<0.001
Other obstacle you encountered	20	18%	15	22%	0.588	17	17%	0.764

Note: All barrier indicators are binary variables. Row frequencies and percents for positive outcome are reported by site.