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"It's Like Being in a Labyrinth:" Hispanic Immigrants' Perceptions of Depression and Attitudes Toward Treatments

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Abstract

This study aimed to describe Hispanic immigrants' perceptions of depression and attitudes toward treatments and to examine how demographics, acculturation, clinical factors, and past service use were associated with their perceptions and attitudes. A convenience sample of 95 Hispanic immigrant patients was presented a vignette depicting an individual with major depression. Structured interviews that included standardized instruments and open-ended questions were used to query patients about their views of depression and its treatments. Findings showed that Hispanic immigrants perceived depression as a serious condition caused by interpersonal and social factors. Consistent with existing literature, most patients endorsed positive attitudes toward depression treatments yet reported apprehensions toward antidepressants. Demographic factors, acculturation, depressive symptoms, and past mental health service use were related to patients' views of depression and attitudes toward care. This study emphasizes the need to incorporate Hispanic immigrants' perceptions and attitudes into depression treatments.

Keywords

Depression; Hispanic immigrants; Illness perceptions; Attitudes toward depression treatment; Vignette methodology

Introduction

Depression is highly prevalent in primary care settings, yet few depressed patients receive guideline congruent care for their symptoms [1, 2]. This trend in care is more pronounced among ethnic and racial minority patients who, compared to Whites, have less access to mental health services and receive lower quality of care [3, 4]. For instance, Hispanics served in primary care are less likely than non-Hispanic Whites to receive evidence-based depression care [5] and are more likely to be served by physicians who fail to detect an existing mental health problem [6]. Studies have found that Hispanics are less likely than Non-Hispanic Whites to receive either a diagnosis of depression or antidepressant medications from their general medical provider [7]. Therefore, whether they are diagnosed

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or receive services in primary care, Hispanics face considerable disparities in the quality of care they receive for depression. These trends in care place Hispanics, particularly immigrants, at higher risks than non-Hispanic Whites for having their mental health needs left unmet [8].

These inequities in care for Hispanics have been attributed to traditional access and service use barriers, such as lack of health insurance, inability to pay for care, dearth of bilingual providers, and lack of culturally congruent mental health services [3]. However, little is known about how Hispanics' perceptions of common mental disorders (e.g., depression) and their attitudes toward mental health treatments influence their decisions to seek help and adhere to treatments [8, 9]. In the present study, we addressed this gap in the literature by examining how Hispanic immigrants served in primary care perceive depression and their attitudes toward depression treatments.

Research indicates that help-seeking behaviors and coping strategies for health and mental health problems are influenced, in part, by how individuals perceive their symptoms and the attitudes and knowledge they have about treatments [10–13]. Studying how Hispanic immigrants perceive and understand depression and its consequences and their attitudes toward treatments can produce valuable information on how these patients cope and manage this illness. This knowledge can inform the development of patient-centered depression care for this underserved population.

Illness perceptions

Our examination of patients' perceptions of depression is guided by Leventhal's [13] self-regulatory model of illness cognition. According to this model, individuals are active problem-solvers who use cognitive representations or perceptions of illness to make sense of their illness experience and, in turn, these perceptions influence how they cope and respond to illness [14]. Illness perceptions are defined as individuals' cognitive and emotional representations of their illness which are influenced by their social and cultural milieu [13, 15]. This model organizes illness perceptions into five interrelated components: (1) label/identity—how people label and describe the illness and symptoms attributable to the illness, (2) causes—ideas about the cause of the illness, (3) timeline—expectations of how long the illness will last (e.g., acute, chronic), (4) consequences—effects and outcomes expected of the illness, and (5) controllability—beliefs about whether the illness is amendable to treatment and/or personal control.

Illness perceptions have been widely used to study a range of chronic physical illnesses (e.g., heart disease, diabetes, cancer; [16–18]) and more recently are being applied to mental illnesses [19–21]. For example, Brown and colleagues [22] found that primary care patients' perceptions of depression were significantly related to their prior and current mental health treatment, medication adherence, and coping strategies. Karasz *et al.* [23] using a vignette methodology found that low-income depressed patients who perceived their depression as a psychosocial (e.g., depression caused as an emotional reaction to life stressors) or psychological problem (e.g., internal problems, low self-image, low-self esteem) had more favorable attitudes toward psychotherapy than to antidepressant medication to treat depression. Although the generalizability of these findings are limited due to the use of small non-random clinical samples, these studies provide initial evidence about how primary care patients' perceptions of depression are associated with their search for mental health care and adherence to treatment.

The evidence about Hispanics' perceptions of mental illness comes from the field of medical anthropology. This literature describes an array of culturally determined labels and perceptions that Hispanic groups use to categorize and make sense of mental illness, such as

nervios (nerves), *fallo mental* (mental deficiency or failure), and *locura* (craziness; [24–26]). One of the most widely studied idioms is *nervios* (nerves), a popular category used by Puerto Ricans, Cubans, Mexicans, and other Hispanic groups to describe an array of symptoms, including fear, anxiety, depression, anger, worries, loss of control, and stressful life circumstances [25–27]. *Nervios* is often linked to individuals' etiological conceptualizations of mental health problems that are associated with situational factors, such as romantic problems, school and/or work failure, interpersonal problems, strain in social roles, and death of loved ones [24, 25].

These conceptualizations have been associated with individuals' sex and socioeconomic status (SES). Guarnaccia *et al*. [24] reported that Hispanic women, mostly Puerto Ricans and Cubans, identified emotional problems, such as failures of romantic relationships and divorce, as triggers for mental illness, while men attributed mental illness to failure in social roles (e.g., loss of work, failures at school). In the same study, those with higher education and income attributed mental health problems to a medical condition rather than to situational or emotional factors [24].

These studies suggest that among Hispanic cultures mental illness is viewed through the prism of culturally determined idioms that provide meaning and understanding to these disorders. These idioms seem to encapsulate unique illness perceptions that resemble the core dimensions (e.g., labels, causes, consequences) specified in the self-regulatory model of illness cognition. More studies are needed to examine Hispanic perceptions of depression and the factors that influence their views of this disorder. The present study is an initial step in this endeavor.

Attitudes toward depression treatments

The hypothesis that attitudes toward mental illness and its treatments contribute to the underutilization of mental health services has a long tradition in the Hispanic mental health literature. Under the rubric of barrier theory, Rogler *et al.* [29] stipulated that cultural values and attitudes, such as viewing mental illness as a somatic problem and not considering psychiatrists as regular sources of help for emotional problems, predisposes Hispanics to underutilize mental health services. However, few studies have directly examined Hispanic attitudes toward mental health treatments and their relationship toward help-seeking and coping behaviors for mental disorders.

The few studies that have examined Hispanic immigrants' attitudes toward depression treatments in primary care reveal that certain attitudes may deter patients from seeking mental health care. These attitudes include being ashamed of what providers will think of them if they discuss emotional problems, not knowing that providers could help them with depression, and the belief that emotional problems should not be discussed outside the family [30, 31]. A limitation of the extant research is that findings reported are only for foreign-born Hispanic women, mostly from Mexico, Central American and South American countries [30, 31].

In a more recent study comparing White, African American, and Hispanic primary health care patients' acceptance of depression treatment, Cooper *et al.* [32] found marked differences between these groups. Compared to Whites, Hispanics and African Americans were more likely to view anti-depressants as addictive and less likely to find these medications acceptable to treat depression. Hispanics also preferred counseling over medications to treat their depression.

Bringing together the limited research on Hispanics' attitudes toward depression treatment, we surmise that attitudes toward treatment play an important role in decisions to seek

treatment and cope with depression. But because of the few studies in this area, we know very little about Hispanic immigrants' attitudes toward depression treatments and the factors that influence these attitudes.

The aims of this study were (1) to describe the perceptions of depression and attitudes toward depression treatments of Hispanic immigrant patients in primary care, and (2) to examine how demographic, clinical, acculturation, and service use factors were associated with these perceptions and attitudes. A mixed-method approach was used to address these aims.

Methods

Sample and procedures

Hispanic immigrant patients were recruited from the waiting room of a primary health care clinic located in St. Louis, Missouri that predominantly serves low-income Hispanic immigrants. From September to December 2004, 152 individuals were approached and invited to participate in the study. One hundred and thirty (85.5%) agreed to participate and were enrolled in the study. No significant difference in sex was reported between those who participated and those who refused. Patients who refused to participate said that they were not interested in the study or had no time to do the interview.

Of 130 who were recruited into the study, 95 (74%) were current patients at the clinic and 35 (26%) were family members (e.g., spouse, partner, sibling) accompanying patients to their visits. Given our focus on Hispanic immigrants served in primary health care settings, only patients' data were analyzed in this study and immigrant status was confirmed by asking patients to report their place of birth. A convenience sample of 95 Hispanic immigrant adult (18 years and older) patients receiving services at this primary care clinic was the main sample for this study.

Patients who chose to participate were invited to one of the clinic's interview rooms where written informed consent was obtained. Once the patient had signed the informed consent and was given a copy of the consent form, research staff interviewed the patient. The average time to administer the interview was 45 min, and all interviews were conducted in Spanish by trained bilingual interviewers. A structured interview format was used to collect information about patients' demographics, acculturation, depressive symptoms, attitudes toward depression treatments, and past service use for mental health problems. A vignette depicting an individual with major depression was also included in the interview to query patients about their views of depression. All study procedures and informed consent forms were approved by the Hilltop Human Subject Committee of Washington University in St. Louis. Additional protection was provided to patients by a federally granted certificate of confidentiality.

Vignette—As part of the structured interview, a standardized vignette adapted from the Mental Health Module of the 1996 General Social Survey [33] depicting an individual meeting DSM-IV criteria for major depression was used (See Appendix A for a copy of the vignette). The vignette was translated into Spanish using back translation techniques [34, 35]. Vignettes stimulate respondents' imagination, reflection, critical thinking, and interest, and facilitate the examination of respondents' attitudes, beliefs and judgments of the situation depicted in the vignette [36, 37]. It also enabled us to examine patients' understanding, evaluation, attitudes, and beliefs related to a specific situation without having to wait for that situation to arise [38, 39].

A pre-recorded audio cassette was used to present the vignette. The gender of the voice presenting the vignette was matched to the patient's sex. Patients listened to the recording of the vignette in their preferred language. They were also given a written copy of the vignette so that they could read along with the recording. The use of a tape-recorded procedure assured consistent presentation of the vignette across patients and reduced interviewer bias (e.g., not reading the entire vignette, using different intonations with each presentation, paraphrasing instructions) in the presentation of the vignette. It also facilitated the presentation of the vignette to individuals with low literacy. After listening to the vignette, patients were asked two open-ended questions and were presented with a modified version of the Illness Perception Questionnaire (IPQ-R; [16]) to elicit their views of the situation.

Measures

Illness perceptions of depression—Patients' perceptions of the vignette were measured using a modified version of the Illness Perception Questionnaire (IPQ-R) [16]. The IPQ-R measures the five core dimensions specified by the SRM, and is used for a variety of physical and mental illnesses [16, 22]. Since this instrument has not been previously used with Hispanic immigrants, an exploratory approach using two open-ended questions ("What would you call the situation presented in the vignette?" and "What do you think caused this situation?") was used to measure the label/identity and causes dimensions, respectively. Responses to these questions were recorded verbatim by the interviewer. Based on the answers given to these questions, a dichotomous variable was created to categorize patients who use the words *depresión* (depression) or *deprimido* (depressed) to describe the situation presented in the vignette from those who did not.

Three scales from the IPQ-R were used to assess the timeline, consequence, and controllability dimensions that underlie patients' illness perceptions. Scale items use a 5-point Likert scale (strongly disagree to strongly agree), and patients' scores were derived from their average score on each dimension. Six items were used to asses the timeline (e.g., acute, chronic) dimension (Cronbach's alpha = .65). The consequence dimension was composed of six items (alpha = .78) as well. High scores in these scales indicated that the patient endorsed a chronic and serious perception of the situation presented in the vignette. Five items were used to assess the perceived controllability dimension (alpha = .62); the higher the score in this scale the more personal and/or treatment control patients attributed to the vignette.

Although the original wording of the IPQ-R items for the timeline, consequence, and controllability dimensions assume patients are currently experiencing the illness in question, a modification to the original wording was made in order to make items relevant to the nature of this study. For instance, the original wording of an item, *My illness will last a short time* was modified to *Laura's situation will last a short time.* All scales were translated into Spanish using back-translation techniques [34, 35].

Attitudes toward depression treatments—Attitudes toward depression treatments were measured using selected items from the Patients Attitudes Toward and Ratings of Care for Depression short version (PARC-D; [40]). The PARC-D is a short scale developed to measure primary health care patients' attitudes, beliefs, and knowledge of depression treatments using a 5-point Likert scale (strongly disagree to strongly agree). Fourteen items from this scale were used in the present study. Two items were used to assess patients' attitudes toward their health care providers' interpersonal skills. Attitudes toward the effectiveness of depression treatments were assessed with four items. Two items were used to assess patients' attitudes toward antidepressant medications. Patients' expectations and knowledge of depression treatments was assessed with two items. Two items were used to

assess religious faith as a mean to cope with depression. Patients' access to depression treatments was assessed with two items. A translated version of this instrument developed and made available by Dr. Andres Consoli from San Francisco State University, College of Health and Human Services was used for this study (A. Consoli, personal communication, June 8, 2004).

Demographic characteristics—Demographic variables included age, sex, years of education, and attendance at religious services (a few times a year or less versus once a month or more).

Acculturation—The bidimensional acculturation scale (BAS) for Hispanics [41] was used to measure acculturation. The BAS consists of 24 items that tap different language-related changes associated with the acculturation experiences of Hispanics. Half of the items measure a Hispanic domain (alpha = .69); the other half measure a non-Hispanic domain (alpha = .91). The BAS combines two 4-point Likert scales, one measuring frequency (almost always to never) the other one measuring proficiency (very well to very poorly). Scores are averaged across items producing two independent scores for each domain (Hispanic and non-Hispanic domain). A 2.5 cut-off point as suggested by Marin and Gamba [41] was used to categorize individuals as high or low in each of the domains. If patients score high on the Hispanic domain and low in the non-Hispanic domain they are categorized as unassimilated. A bicultural indicator was created if patients score high on both domains.

Clinical characteristics—Patients' clinical characteristics included current level of depressive symptoms and general health status. The Center for Epidemiological Studies Depression Scale (CES-D; [42]) was used to measure patients' depressive symptoms. The CES-D is a widely used depression scale consisting of 20 items that assess different depressive symptoms, such as mood, vegetative signs, guilt, worthlessness, and hopelessness, during the past seven days. The instrument uses a 4-point frequency scale (rarely or none of the time to most or all of the time). High scores in the CES-D indicate greater severity of symptomatology. Items are summed and a cutoff point of 16 or greater is used to identify individuals who experienced depression in the past week. The CES-D has established reliability and validity in both community and clinical samples as well as in the Hispanic population [43, 44]. The Cronbach's alpha for the CES-D in our study was .90.

General health status was measured with a single question asking respondents to rate their current health status on a 5-point Likert scale, ranging from excellent to poor. This global measure provides a summary of how patients perceive their health and well-being [45]. This measure has been found to be a powerful predictor of clinical outcomes and mortality across multiple diseases and populations [45, 46].

Lifetime use of services for mental health problems—Patients were asked to indicate whether they have visited a mental health specialist (e.g., psychiatrist, psychologist, counselor, social worker, psychiatric nurse), a general medical provider (e.g., family physician, internist, nurse), and/or other non-professional providers (e.g. priest, minister, *curandero*, astrologer) for a problem with their emotions, nerves or mental health in their lifetime.

Vignette questions—In order to assess how patients identified with the situation presented in the vignette, five yes/no questions were developed. For instance, patients were asked whether they could imagine experiencing a similar situation to that described in the vignette, whether they knew of a family member or friend who had experienced a similar situation or whether they had ever felt this way.

Analyses

Frequencies and measures of dispersion (e.g., means, standard deviations) were used to describe patients' demographic and clinical characteristics, acculturation, past service use, patients' illness perceptions across the three IPQ-R scales (i.e., timeline, consequence and controllability) and the PARC-D items. A grounded theory approach was used to analyze the responses to the open-ended questions included in the IPQ-R regarding the label/identify and cause dimensions. Grounded theory is an inductive process that uses open-coding that involves "breaking down, examining, comparing, conceptualizing, and categorizing data" [47]. The first author read and analyzed responses to these questions as the data was being collected. The second author, a medical anthropologist, audited the first author's analysis as it was being conducted. This auditing technique is used to evaluate the quality of the data analysis and provides the opportunity for a second party to examine the rigor of the analytical process as it is being conducted [48]. Throughout the data collection phase of the study, the first author shared with the second author all of the raw data as it was being collected, the coding schemes as they were being developed, and all of the analytical memos that explained analytical decisions. We then met regularly (e.g., once a month) to discuss this process. Throughout these meetings, we discussed the themes and categories that emerged from the data as well as the thematic labels used to describe the content of these categories and identified areas for further probing. This approach enabled us to develop meaningful categories grounded on the data. NVIVO 2.0 [49] was used to assist in the management and analysis of qualitative data. Chi-square and independent sample *t*-tests were used to examine the associations between patients' demographics, acculturation, clinical characteristics, and lifetime use of services for a mental health problem and their illness perceptions and attitudes toward depression care.

Results

Sample characteristics

This sample of 95 Hispanic immigrant patients had a mean age of 30 years, was predominantly female and of Mexican origin, and tended to attend church or religious services on a frequent basis (see Table 1). Most patients were recent immigrants and were categorized into two groups, unassimilated or bicultural, based on their BAS scores. Those categorized as unassimilated reported that they spoke Spanish frequently and very well and were not proficient in speaking and understanding English. A minority of patients were categorized as bicultural, indicating that they were proficient in English and Spanish. Forty-one percent of patients reported significant levels of current depressive symptoms (CESD ≥16) in the previous seven days, and 40% rated their general health as poor/regular. One-third of patients reported visiting a mental health professional, 19% had visited a general medical provider, and 14% had visited a non-professional for a mental health problem in their lifetime. The majority of patients identified themselves with the situation presented in the vignette. More than three-fourths could imagine experiencing a similar situation (83%) and reported having felt this way in the past (77%). More than half (67%) also reported having experienced a similar situation in the past.

Illness perceptions of depression

Identity—Fifty-five percent of patients used the word *depresión* (depression) or *deprimido* (depressed) in either the label (What would you call this situation?) or cause (What do you think caused this situation?) questions to describe the situation in the vignette. The cardinal symptoms of depression (e.g., anhedonia, hopelessness, helplessness) were reflected in the use of these labels, as shown in the following quotes:

> [Interviewer: What would you call this situation?] A depression. [What do you mean by that?] All doors are closed and even the most beautiful things don't make her happy. It is like a dead end street, it's like being in a labyrinth and I do not know how get out of a labyrinth.
>
> [What would you call this situation?] A depressed person [What do you mean by that?] Discouraged, feels like the world is crumbling, there is no way out … no way out of his problems.

Suicide and suicidal ideation were also common themes used to describe the vignette. This theme included ideas of not wanting to live, of giving up and wanting to disappear. Patients' views of the vignette also encompassed the theme of s*in ánimo* (discouraged), described as feeling discouraged with ones' life, feeling sad and dejected, as exemplified in the following comments:

> Discouraged, feels sad. Doesn't enjoy the things he likes to do.
>
> Depression. Nothing satisfies you, you feel like something is missing.

Themes of worthlessness and low-self-esteem were also linked to how patients talked about the depressive experience reflected in the vignette. For some patients, depression was described as doubting one self, feeling insecure, and as something that takes the flavor out of one's life:

> Like you are worth nothing, you are an insignificant person to other people.
>
> [Interviewer: What do you mean by that?] Well he has depression. His self-esteem is on the ground. His life is without taste and flavor. He feels squeezed.

Patients also described depression as a complex phenomenon in which the person falls into a downward spiral of self-doubt, helplessness, and feeling trapped and overwhelmed by life problems. This experience was seen to affect the persons' every day functioning and motivation, and threatened the person's livelihood, as suggested by this female patient's comment:

> She is going through a depression [Interviewer: What do you mean by that?] All of her problems must have accumulated and she has not asked for help in time and things get worse and worse. It is when your problems get all tangled up and you can't find a solution and problems continue accumulating and one feels worthless and discouraged and tired and one can't sleep and you wake up tired without strength to face the day. Everything seems almost impossible to do, there is no objective. One feels useless.

Cause—The most prevalent causes attributed to the vignette are presented in Fig. 1. Interpersonal problems were the most common cause attributed to the vignette. For many patients, depression was seen to come from problems at home, related to romantic problems and family conflicts that threatened the integrity of the family unit, such as infidelity and spousal abuse. The following quotes exemplify this interpersonal theme.

> Because of the problems at home, that's where depression comes from.
>
> That her husband or boyfriend be with another woman.
>
> She cares a lot for her boyfriend and he betrayed her, she found out that he was being unfaithful. That makes you very emotional and makes you want to give up and you feel that you don't want to go on living anymore.

For many patients, the situation presented in the vignette was caused by the betrayal that one feels when the person they loved and trusted was unfaithful. Other interpersonal issues

mentioned as causal factors included: divorce, fights between family members, and partner or spousal abuse, particularly among female patients.

Another common cause attributed to the vignette was economic strain, such as unemployment, debts, and economic insecurity. Lack of financial resources, mounting debts, and unemployment was seen as a major contributor to the situation presented in the vignette. Economic strain also included issues associated with role strain in which the person could not afford to sustain and provide for ones' family. The following comments are representative of this theme:

> Too many bills to pay, not having enough money to pay the bills.
>
> Sometime it is the lack of jobs, not having money.
>
> It could be that she was fired from a job. She owes money and can't pay, and that's why she feels this way.
>
> Money problems, do not have enough money to move one's family ahead.

Sin apoyo (lack of support) was also perceived as a major cause of the situation presented in the vignette. This category refers to issues of not feeling connected to other people, feeling alone, and lacking an emotional support system to cope with life problems. For some patients, the lack of close and trusting interpersonal relationships was seen to cause someone to experience depression, as expressed by this female patient.

> [What do you think caused this situation?] Lack of support … being alone. Nobody listens to you … You don't have anyone to turn to. Maybe her parents, her siblings don't give her the support she needs.

Sin apoyo also entailed being away from family members and feeling disconnected from them. Some patients reported that being away from their family unit can contribute to someone's depression. This theme also included lack of trusting friendships. For some patients, not having a close friend to confide in was seen as a major cause of feeling depressed. All of these components of s*in apoyo* are presented in the following comments.

> Simply she does not have a family here and she feels depressed and she wants to talk to them but she can't, she does not have them near.
>
> Maybe she feels alone. She doesn't have any friends… Mostly she doesn't have anyone she can talk to.
>
> She doesn't have any friends; she needs someone to take her out of her sadness. You always need someone.

Physical illness was also mentioned as a possible cause of the situation presented in the vignette. Some patients talked about how having a chronic medical illness, especially a condition with no cure (e.g., HIV), could cause someone to experience a similar situation. For others, not having the economic resources to pay for medical attention for a physical illness impacted their emotional state and everyday functioning. For example, one female patient used her personal experience to explain how she viewed the relationship between physical illness and depression:

> It is because I have felt like her because I have an illness and I can not pay for services, I feel depressed… . doors close on me and I don't know what to do.

Bereavement and substance abuse were also mentioned by a minority of patients as possible causal factors. The theme of bereavement entailed the experience and shock of losing a loved one. This loss was described as a situation in which the person feels as if everything is

crumbling around them and the person begins to feel dejected and depressed, as described by this male patient:

> A loved one died and everything came crumbling down. [What do you mean by everything came crumbling down?] Because he does not feel like doing anything… he can't enjoy himself, nothing makes him happy.

For some patients, the vignette presented a person who was abusing drugs or alcohol to cope with economic strains or family problems. For example, this male patient described how family problems or economic hardship may drive someone to drink alcohol or use drugs as a way to cope with these problems. Yet, the use of these substances fails as a coping mechanism and takes a toll on the person creating the conditions for experiencing depression. This quote also highlights how the causes attributed to the vignette were not mutually exclusive, but instead interlinked:

> Many times it's drugs or alcohol. It could be a situation with the family or a financial issue and that may make someone drink or use drugs and this does not help resolve the person's problems and all of this gives someone a guilty conscience and because of all of this one is depressed.

Timeline—The frequencies of patients' responses to the timeline, consequences, and perceived controllability scales of the IPQ-R are presented in Table 2. Most patients agreed or strongly agreed that the situation presented in the vignette would last a short time (48%), pass quickly (50%), and would improve with time (88%). Few patients (18%) viewed the vignette as a chronic condition.

Consequences—Most patients viewed the situation in the vignette as a serious condition. Eighty-one percent agreed or strongly agreed that the situation was a serious condition and 82% reported that it would produce major consequences in a person's life. When queried about specific consequences that the situation could have in a person's life, 59% agreed or strongly agreed that it would affect how others view the person, 55% indicated that it could cause serious financial consequences, and 80% reported that it could cause difficulties for those who are close to the person. Few patients (18%) suggested that the situation would not have a major consequence in a person's life; in fact, 68% strongly disagreed or disagreed with this statement.

Perceived controllability—Most patients agreed or strongly agreed that the situation presented in the vignette could be controlled. Ninety-one percent felt that there was a lot that could be done to control the symptoms presented in the vignette, and 81% reported that what the person does could determine whether the situation gets better or worse. The majority of patients also reported that treatment could help control the situation presented in the vignette.

Correlates of illness perceptions—Relationships between patients' demographics, acculturation, clinical characteristics and lifetime use of services for mental health problems and the three IPQ dimensions (time-line, consequences and perceived controllability) are presented in Table 3. No significant relationships were found between the three IPQ-R dimensions and patients' sex, attendance at religious services, acculturation, general health status, and lifetime use of general medical providers and non-professionals for mental health problems.

Patients who reported significant depressive symptoms (CESD score ≥ 16) in the previous seven days perceived the situation in the vignette as more chronic than their counterparts who did not report significant depressive symptoms ($t = -2.74$, $df = 93$, $p = .01$). Years of

education and lifetime use of a mental health profession were significantly related to the consequence dimension. Patients with 12 or more years of education rated the vignette as a more serious condition than those with less than twelve years of education ($t = -2.51$, $df = 93$, $p = .01$). Likewise, patients who had visited a mental health professional in their lifetime perceived the vignette as a more serious condition than patients with no prior use of these services ($t = 3.02$, $df = 93$, $p = .003$).

Chi-square analyses were used to examine factors related to identifying the vignette as depression. No relationships were found between identifying the vignette as depression and patients' sex, education levels, attendance at church, clinical factors (i.e. depression and general health status), and past mental health service use of professional and non-professional providers. However, acculturation was significantly related to identifying the vignette as depression ($\chi^2 = 5.92$, $df = 1$, $p < .01$). A higher proportion of patients who were categorized as bicultural (82%) identified the situation in the vignette as depression than those who were not bicultural (i.e., unassimilated; 50%). Moreover, a significantly higher proportion of patients ($\chi^2 = 4.35$, $df = 1$, $p < .05$) who reported having used a general medical provider for a mental health problem in their lifetime (78%) described the vignette as depression than their counterparts who had not used this service (51%).

Attitudes toward depression treatments

Patients' attitudes toward depression treatments are shown in Table 4. Most patients endorsed positive attitudes toward their doctors' interpersonal skills. Eighty-seven percent reported that they trusted that their doctor acted in their best interest, and 89% felt that their doctor listened to them. In general, patients endorsed positive attitudes toward the effectiveness of depression treatments. However, a preference toward counseling over antidepressant medication to treat depression was observed. Eighty-four percent of patients agreed or strongly agreed with the statement, "counseling restores depressed individuals to their normal level of functioning," while only 64% expressed positive attitudes toward a similar statement about antidepressant medications. When asked whether "counseling will help depressed individuals just as much as antidepressant medication," 75% strongly agreed or agreed with this statement compared to only 62% who strongly agreed or agreed with the statement, "most antidepressant medications are effective in treating depression." Respondents also reported more ambivalent answers (neither agreed nor disagreed) to items about the effectiveness of antidepressant medications (items 3 and 5) than toward counseling (items 4 and 6).

Apprehensions toward antidepressant medications were also observed. Sixty-one percent agreed or strongly agreed that antidepressants were addictive, and 38% thought that they made people feel drugged. A substantial number of ambivalent answers were reported for these two items. Twenty-seven percent of patients neither agreed nor disagreed with the statement that antidepressant medications are addictive, while 36% of patients were ambivalent as to whether antidepressants make people feel drugged.

Approximately half of the patients reported knowing what to expect from depression treatment (49%). The other half was mostly ambivalent about their expectations of depression treatments (34%), and a minority (16%) felt they did not know what to expect from these treatments. Fifty-six percent of patients felt they had enough information to cope with depression, while 24% felt they did not have enough information, and 20% were ambivalent.

The majority of patients also endorsed positive attitudes toward the role of faith in helping people cope with depression. Eighty-seven percent reported that faith in God will help heal depression, and 77% reported that asking God for forgiveness will help heal depression.

Most patients reported having limited access to depression treatment. Forty-five percent strongly disagreed or disagreed that they could afford mental health treatment for depression and 77% felt their health insurance would not cover enough of the cost of depression care.

Correlates of attitudes toward depression treatments—Bivariate analyses using independent sample *t*-tests were conducted to examine the relationships between patients' demographics, acculturation, clinical factors, and lifetime use of services for mental health problems and each of the 14 items of the PARCD (analyses not shown; available upon request). Attitudes toward the health care providers' interpersonal skills were associated with patients' sex, depressive symptoms, and lifetime use of a general medical provider for a mental health problem. On average, men endorsed more positive attitudes toward trusting that their doctors acted in their best interest ($t = 3.11$, $df = 69.1$, $p = .003$) and listened to them ($t = 2.31$, $df = 71.3$, $p = .02$) than women. Compared to patients who were not depressed, those who reported significant depressive symptoms (CESD score ≥ 16) on average had less confidence in trusting that their doctors acted in their best interest ($t = 2.42$, $df = 64.3$, $p = .02$) and listened to them ($t = 3.28$, $df = 57.3$, $p = .002$). Furthermore, patients who reported visiting a general medical provider for a mental health problem in their lifetime endorsed more positive attitudes toward feeling that their doctor listened to them ($t = -3.46$, $df = 46.3$, $p = .001$) than those who had not consulted a general medical provider for a mental health problem in their lifetime.

Attitudes toward depression treatment effectiveness were also related to patients' sex, depressive symptoms, and lifetime use of a non-professional for a mental health problem. Men had more positive attitudes than women in viewing counseling as effective as antidepressants in treating depression ($t = 3.72$, $df = 68.1$, $p = .0004$). Compared to patients who were not depressed, those who reported significant depressive symptoms were more skeptical about the effectiveness of antidepressant medications in treating depression ($t = 1.94$, $df = 93$, $p = .05$). Likewise, patients who reported visiting a non-professional for a mental health problem in their lifetime were more skeptical about the effectiveness of antidepressant medications ($t = 2.16$, $df = 93$, $p = .03$) than those who had not consulted a non-professional for a mental health problem in their lifetime.

None of the correlates tested were significantly related to patients' attitudes toward treatment problems, treatment knowledge and expectations, and access to care. Attitudes toward intrinsic spirituality—the role of faith in helping people cope with depression—were related to patients' sex and attendance at church or religious services. Men reported more positive attitudes than women in believing that faith in God heals depression ($t = 2.18$, $df = 61.2$, $p = .03$). Moreover, patients who reported attending church or religious services once a month or more on average had more positive attitudes toward believing that faith in God will heal depression ($t = -2.12$, $df = 34.7$, $p = .04$), and that asking God for forgiveness will help heal depression ($t = -2.58$, $df = 39.1$, $p = .01$), than patients who attended church or religious services a few times a year or less.

Discussion

Perceptions of mental illness and attitudes and knowledge of mental health treatments influence individuals' help-seeking and coping strategies for health and mental health problems [10–13]. Little is known about the views and attitudes that Hispanic immigrants have about mental illness and its treatments. We found that Hispanic immigrants perceived depression as a serious condition caused primarily by interpersonal and social factors. Consistent with existing literature, most patients endorsed positive attitudes toward depression treatments, yet reported apprehensions toward antidepressants. Demographic

factors, depressive symptoms, acculturation, and past mental health service use were related to patients' perceptions of depression and attitudes toward depression treatments.

Several limitations should be considered before discussing findings from this exploratory study. The use of a convenience sample of service users recruited from one primary health care clinic in a Midwestern city limits the generalizability of this study in several ways. First, it prevents us from generalizing findings to Hispanic immigrants who do not use primary health care services. Second, the patients in our sample were mostly recent immigrants of Mexican descent who were at the beginning stages of their acculturation process and were part of a community that has not yet established deep historical, social, and political roots in the city of St. Louis. They differ in fundamental ways to Hispanics who are more acculturated and/or live in cities with well-established and diverse Hispanic communities (e.g., Los Angeles, Chicago, New York). Given the scarcity of studies focusing on the experiences of Hispanics living in Midwestern communities [50], our study provides preliminary knowledge about the unique experiences and views of Hispanics from these developing communities.

Furthermore, the translation and modifications that were done to the IPQ-R items to fit the context of this study may have inadvertently contributed to the low reliability observed in the timeline and controllability scales. Future studies are needed to test the psychometric properties of this instrument with a large and more diverse sample of Hispanics. The vignette methodology used in this study provided, at best, an approximation of how patients viewed depression. More studies are needed to expand the external validity of this study by examining how Hispanic immigrants perceived their own depressive symptoms and their attitudes toward treatments, and to compare these attitudes and perceptions with other non-Hispanic groups. Lastly, the cross-sectional nature of this study prevented us from making causal inferences.

Notwithstanding these limitations, our findings showed that Hispanic patients attributed the causes of depression to social pressures and life circumstances rather than to internal mechanisms related to biological, genetic or chemical factors. For many patients, depression represented "being in a labyrinth" of interpersonal problems and economic strains, and lacking the emotional support system to help them cope with these difficulties in their everyday life. These explanations can be placed within a "situational" model of depression like that reported by Karasz [20] and Patel [51] which emphasizes social problems, such as interpersonal conflicts, stress, isolation, financial difficulties, and other contextual factors as the causes of depression. General population surveys in the U. S. and Europe have found that individuals commonly attribute situational factors, such as stress, difficulties in family relationships, and unemployment, as causes of depression [33, 52, 53]. Our findings are also consistent with several studies that have reported how Hispanic (e.g., Mexicans, Puerto Ricans, Cubans) and other ethnic minority groups (e.g., South Asians) view mental illnesses as a reaction to social situations, particularly interpersonal conflicts and strains in social roles [20, 24, 25].

Consistent with Karasz's [20] findings, patients' perceptions of depression were found to mirror cultural values. For example, the saliency of interpersonal problems, especially family conflicts, and the lack of an emotional support system composed primarily of family members as common causes of depression reflect the importance that Hispanic immigrants place in the family unit and the cultural value known as familism [54]. This cultural value refers to the centrality of the family in the identity and everyday life of Hispanic individuals [55]. It reflects solidarity, loyalty, cohesion, and reciprocity with nuclear and extended family members as well as viewing the family as an important source of emotional and instrumental support [56, 57]. For many patients, depression was equated with "problems at

home" linked to the disintegration—real or imagined—of the family as an emotional and instrumental supportive system. Threats to the family unit and familism through divorce, abuse, infidelity, isolation, and loss of supportive relationships due to immigration among others, represented for many patients core causal factors linked to the experience of depression.

In contrast with previous studies, idioms of distress, such as *nervios* (nerves), *locura* (craziness) or *fallo mental* (mental defect) were not used by individuals in our sample to describe the behaviors presented in the vignette. The vignette used in our study did not present common symptoms associated with these idioms of distress, which may explain why these were not expressed by patients in the present study. This finding also suggests that patients in our study may have been able to differentiate between depression and the psychotic, more seriously disturbed behaviors commonly associated with *locura* and *fallo mental.* Moreover, methodological issues such as differences in samples and interviewing techniques (e.g., in-depth interview vs. structure interviews) could have contributed to this departure from past findings.

Our findings showed that perceptions of depression were associated with patients' acculturation, years of education, depressive symptoms, and previous use of mental health services. Being categorized as bicultural was related to identifying the vignette as depression. The process of acculturation, particularly the use and proficiency of speaking the dominant culture's language (i.e., English), may expose individuals through media (e.g., television, radio) and interactions with members of the dominant culture to the medical terms and labels used to describe depression.

Perceiving the vignette as having serious consequences on a persons' life was related to patients' years of education and past mental health service use. Education serves as a vehicle for assimilating immigrants to the institutional practices and norms of the dominant culture and may facilitate immigrants' acquisition of knowledge about depression and its consequences.

Patients who used mental health services in the past may have personally identified with the situation in the vignette and used their experiences and struggles with mental illness to shape their perceptions of depression. Moreover, viewing the vignette as a chronic condition was associated with patients' depressive symptoms. This association may have been prompted by the effects that depressive symptoms have on patients' cognition and their orientation toward the future (e.g., hopelessness and helplessness), thus influencing how they perceived the situation presented in the vignette.

We also examined patients' attitudes toward depression treatments. Overall, patients endorsed positive attitudes toward their health care providers' interpersonal skills. Patients' positive experiences with their primary care doctors may have shaped these positive attitudes. The reverence and respect that Hispanic immigrants have for authority figures, such as doctors and other health care professionals [58], could have also contributed to the attitudes they expressed toward their doctors.

Attitudinal differences between counseling and antidepressant treatments were observed. Although patients expressed positive attitudes toward the effectiveness of both antidepressants and counseling to treat depression, they showed a slight preference toward counseling. Answers to the items about antidepressant treatments also suggest that patients had some apprehensions and doubts about the effects of these medications and their effectiveness in treating depression. Similar attitudes toward antidepressant treatments have been reported in Hispanic primary care patients [32] and in general population surveys [59]. More research is needed to understand the causes of these apprehensions toward

antidepressant medications and how they influence Hispanic immigrants' help-seeking behaviors and treatment adherence.

Interestingly, about half of the patients reported that they knew what to expect from depression treatment and felt they had enough information to deal with depression. The other half was either ambivalent or reported very little knowledge about depression treatments. These findings taken together with the negative views expressed about antidepressant medications suggest a need to raise awareness in Hispanic immigrant communities about the effectiveness of available depression treatments.

The majority of patients viewed faith in God and asking for God's forgiveness as important coping strategies for depression. This finding is consistent with previous studies that have reported how Hispanics and other racial and ethnic minority groups (e.g., African Americans) use religious coping and rely on clergy as a source of care to cope with mental health problems [3, 24, 60]. Furthermore, few patients felt they could afford or had access to depression treatments. These findings are expected inasmuch as the majority of patients (78%) in this study lacked health insurance. Financial barriers (e.g., inability to pay for care, lack of health insurance) to accessing mental health care have consistently been reported across Hispanic groups [3, 61].

Several interesting relationships were found between attitudes toward depression treatments and patients' sex, attendance at church, depression, and past use of services. Men endorsed more positive attitudes toward their doctors' interpersonal skills, counseling effectiveness, and the role of faith in coping with depression than women. These sex differences could have resulted from a systematic bias in the type of men who participated in our study. Since Hispanic men tend not to use primary care services on a regular basis [62], the men who participated in our study may represent a select group who differ from other Hispanic men in their attitudes toward health and mental health care. We also explored whether sex differences in acculturation, years of education, depression levels, and past service use could help explain these attitudinal differences between men and women. We found no significant sex differences in acculturation, years of education, and past service use. However, women on average reported significantly higher CESD scores ($t = 1.96$, $df = 93$, $p = .05$) than men (avrg. scores 18 and 13, respectively). This finding suggests depressive symptoms may have played a role in attitudinal differences between men and women since depression was associated with negative attitudes toward doctor's interpersonal skills and treatment effectiveness (see below). Given that very little is known about how sex influences Hispanics' attitudes toward depression care, the differences reported in our study are at best tentative and deserve further investigation with a more representative sample.

Depressive symptoms were related to patients' attitudes toward their doctors' interpersonal skills and the effectiveness of antidepressants in treating depression. This finding suggests that depressive symptoms, through their impact on patients' attitudes, may interfere with the development of a trusting doctor-patient relationship, possibly hindering the identification and treatment of depression. In addition, patients' distrust of physicians and their skepticism toward the effectiveness of antidepressants may act as a barrier for seeking professional care and adhering to treatment. Physicians and other mental health clinicians (e.g., social workers, psychologists) need to explore and openly discuss these negative attitudes early on in the treatment process in order to engage patients into treatment. These discussions should focus on clarifying the clinicians' role in the patients' treatment and inquire about any doubts, concerns, or misconceptions patients may have about the effectiveness and side effects of antidepressant medications.

Patients' doubts about the effectiveness of antidepressants were related to having visited a non-professional (e.g., priest, minister, *curandero*) for a mental health problem. This finding suggests that reliance on non-professionals may be related to skepticism about the effectiveness of depression treatments or to the conflicting advice patients may get from non-professionals and their physicians about the value of medications to treat affective disorders [63]. Given that few patients in our sample reported using non-professionals for a mental health problem, more work in this area is needed to better understand how patients' attitudes toward mental health care influence their help-seeking choices and pathways to treatment.

Lastly, the reliance on faith in God and prayer as important strategies for coping with depression was directly related to patients' attendance at church or religious services. This finding provides some evidence for the construct validity of these items and for the important role that spirituality plays in the lives of these patients.

Understanding patients' perceptions of depression and attitudes toward treatments can help practitioners engage patients into treatment and provide better patient-centered care [64]. Our findings indicate that almost half of the patients in our sample could not identify the situation in the vignette as depression, and many reported apprehensions and ambivalence toward antidepressant medications. These findings suggest that public health campaigns and outreach programs targeting Hispanic immigrants are needed to increase their awareness about the signs and symptoms of depression and dispel misconceptions about pharmacological treatments.

Clinicians can also use diagnostic assessment models, such as the cultural formulation model [65], to systematically elicit patients' perceptions of depression and their attitudes toward treatments. The aim of this model is to help clinicians take culture into consideration during the diagnostic and treatment process by inquiring about patients' cultural background and identity, explanatory models of illness, and how their psychosocial environment influences their illness and functioning [66]. This model provides clinicians a window into the patients' world and helps them identify how patients' culture shape their presentation of symptoms, help-seeking decisions and behaviors, and treatment adherence. The incorporation and use of patients' cognitions into the assessment and treatment process can facilitate patient-provider communications, build trust, and enhance the therapeutic alliance, an important ingredient for the success of depression treatment.

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Appendix A. Vignette

Vignette was adapted from the Mental Health Module of the 1996 General Social Survey [33].

Laura

Instructions

Now, I'm going to describe a person—let's call her Laura. As you listen to what is happening to Laura, I want you to imagine yourself going through the same situation. Please listen as carefully as you can and try to put yourself in her situation. Later, I'll ask you some questions about what you think and feel about Laura.

For the last two weeks Laura has been feeling down. She wakes up in the morning with a flat, heavy feeling that sticks with her all day long. She isn't enjoying things the way she normally would. In fact, nothing seems to give her pleasure. Even when good things happen, they don't seem to make Laura happy. She pushes on through her days, but it is really hard. The smallest tasks are difficult to accomplish. She finds it hard to concentrate on anything. She feels out of energy and out of steam. And even though Laura feels tired, when night comes she can't get to sleep. Laura feels pretty worthless, and very discouraged. Laura's family has noticed that she hasn't been herself for about the last month, and that she has pulled away from them. Laura does not feel like talking.

Roberto

Instructions

Now, I'm going to describe a person—let's call him Roberto. As you listen to what is happening to Roberto, I want you to imagine yourself going through the same situation. Please listen as carefully as you can and try to put yourself in his situation. Later, I'll ask you some questions about what you think and feel about Roberto.

For the last two weeks Roberto has been feeling down. He wakes up in the morning with a flat, heavy feeling that sticks with him all day long. He isn't enjoying things the way he normally would. In fact, nothing seems to give him pleasure. Even when good things happen, they don't seem to make Roberto happy. He pushes on through his days, but it is really hard. The smallest tasks are difficult to accomplish. He finds it hard to concentrate on anything. He feels out of energy and out of steam. And even though Roberto feels tired, when night comes he can't get to sleep. Roberto feels pretty worthless, and very discouraged. Roberto's family has noticed that he hasn't been himself for about the last month, and that he has pulled away from them. Roberto does not feel like talking.

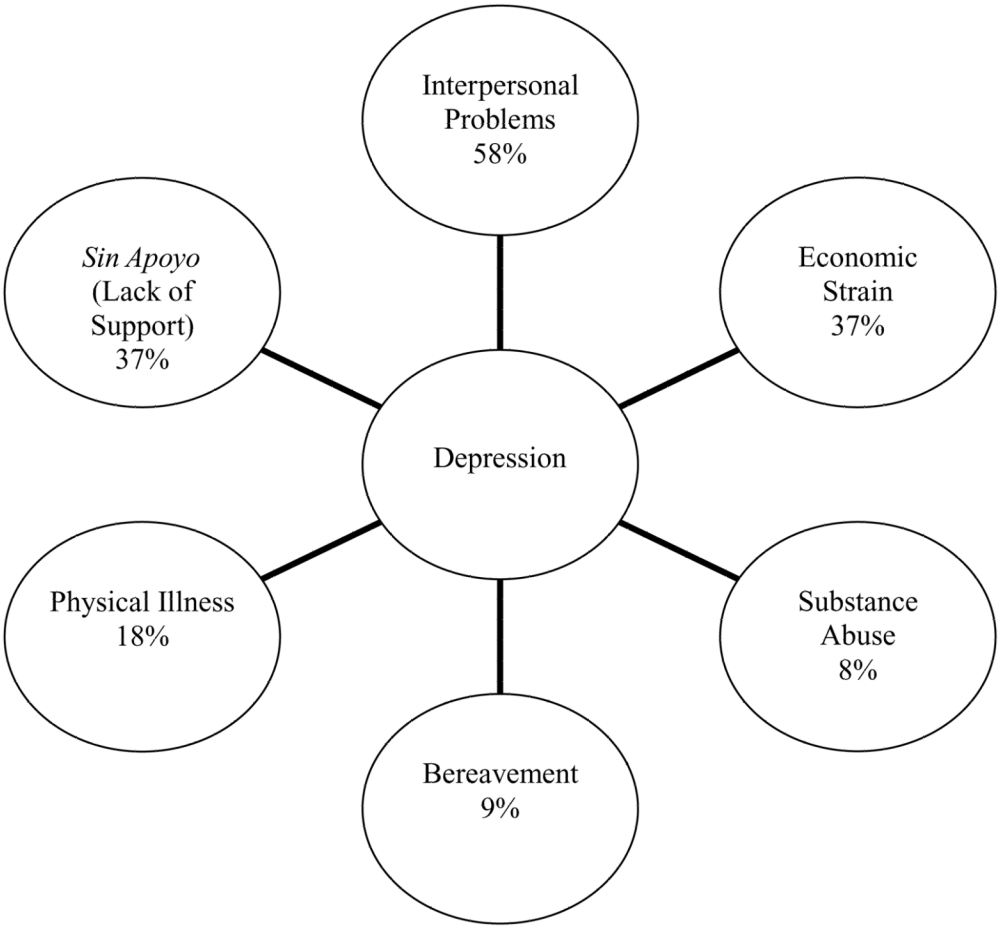

Fig. 1.
Causes attributed to the Vignette[a] (*n* = 95). [a]Causes were not mutually exclusive, therefore percentages add up to greater than 100

Table 1

Sample characteristics (n = 95)

	Mean (SD)	Percent
Demographics		
Age	30 (10)	
Years of education	9 (3.77)	
Female		75
Place of birth		
Mexico		75
Central America[a]		17
Caribbean[b]		5
South America[c]		3
Attendance at church or religious services (once a month or more)		71
Acculturation		
BAS Hispanic domain score	3.45 (.34)	
BAS non-Hispanic domain score	1.94 (.65)	
Years living in the U. S.	6 (4.98)	
Unassimilated		82
Bicultural		18
Clinical characteristics		
CES-D score	16.88 (11.52)	
CESD score ≥ 16 and above		41
General health status (poor/regular)		40
Lifetime use of services for mental health problems		
Mental health professionals		28
General medical providers		19
Non-professional providers		14
Identification with the Vignette		
Imagine experiencing a similar situation		83
Know of family member or friend who has experienced a similar situation		48
Experienced themselves a similar situation		67
Had felt this way in the past		77
Currently feeling this way		39

[a] Honduras, Guatemala, and El Salvador.

[b] Puerto Rico, and Cuba.

[c] Bolivia, Perú, and Venezuela.

Table 2

Frequency of patients' responses to the IPQR items (n = 95)

Items	Strongly disagree or disagree *n* (%)	Neither agree nor disagree *n* (%)	Strongly agree or agree *n* (%)
Timeline			
1. Laura's/Roberto's situation will last a short time	19 (20%)	30 (32%)	46 (48%)
2. Laura's/Roberto's situation will be permanent rather then temporary	61 (64%)	16 (17%)	18 (19%)
3. Laura's/Roberto's situation will last for a long time	52 (55%)	25 (26%)	18 (19%)
4. Laura's/Roberto's situation will pass quickly	29 (31%)	19 (20%)	47 (50%)
5. Laura's/Roberto's situation will last for the rest of her/his life	69 (73%)	9 (10%)	17 (18%)
6. Laura's/Roberto's situation will improve with time	5 (5%)	6 (6%)	84 (88%)
Consequence			
7. Laura's/Roberto's situation is a serious condition	10 (11%)	8 (8%)	77 (81%)
8. Laura's/Roberto's situation has major consequences in his/her life	10 (11%)	7 (7%)	78 (82%)
9. Laura's/Roberto's situation does not have much effect on her/his life	65 (68%)	13 (14%)	17 (18%)
10. Laura's/Roberto's situation strongly affects the way others see her/him	25 (26%)	22 (23%)	56 (59%)
11. Laura's/Roberto's situation has serious financial consequences	21 (22%)	22 (23%)	52 (55%)
12. The situation causes difficulties for those close to Roberto/Laura	13 (14%)	6 (6%)	76 (80%)
Perceived controllability			
13. There is a lot Laura/Roberto can do to control these symptoms	3 (3%)	6 (6%)	86 (91%)
14. What Laura/Roberto does determines whether the situation gets better or worse	6 (6%)	12 (13%)	77 (81%)
15. Treatment will be effective in curing Laura's/Roberto's situation	3 (3%)	3 (3%)	89 (94%)
16. The negative effects of Laura's/Roberto's situation can be prevented by treatment	5 (5%)	8 (8%)	82 (86%)
17. Treatment can control Laura's/Roberto's situation	2 (2%)	8 (8%)	85 (89%)

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Table 3

Correlates of illness perceptions

		Timeline		Consequences		Perceived controllability	
	N	Mean (SD)	*t* (*df*)	Mean (SD)	*t* (*df*)	Mean (SD)	*t* (*df*)
Demographic Factors							
Sex							
Male	24	1.32 (.77)	−.35 (93)	2.88 (.70)	.84 (93)	3.33 (.50)	.93 (93)
Female	71	1.38 (.64)		2.72 (.79)		3.23 (.53)	
Education							
Years of education <12	65	1.36 (.62)	−.05 (93)	2.82 (.77)	−2.51 (93)**	3.35 (.53)	−.83 (93)
Years of education ≥ 12	30	1.37 (.80)		3.30 (.68)		3.49 (.48)	
Attendance at church/religious services							
A few times a year or less	28	1.42 (.74)	.57 (93)	2.61 (.81)	−1.22 (93)	3.29 (.52)	.45 (93)
Once a month or more	67	1.34 (.65)		3.01 (.90)		3.36 (.52)	
Acculturation							
Unassimilated	78	1.35 (.67)	−.47 (93)	2.87 (.76)	−1.60 (93)	3.26 (.51)	.53 (93)
Bicultural	17	1.43 (.73)		3.43 (.78)		3.19 (.56)	
Clinical factors							
Depressive symptoms							
CESD score <16	56	1.21 (.63)	−2.74 (93)**	2.76 (.80)	.01 (93)	3.3 (.54)	1.16 (93)
CESD score ≥ 16	36	1.58 (.69)		2.76 (.72)		3.17 (.49)	
General health status							
Poor/regular	38	1.43 (.71)	.75 (93)	2.69 (.80)	−.75 (93)	3.16 (.59)	−1.40 (93)
Good/very good/excellent	57	1.32 (.65)		2.81 (.75)		3.31 (.46)	
Lifetime use of services for mental health problems							
Mental health professional							
No	68	1.29 (.63)	−1.67 (93)	2.62 (.79)	−3.02 (93)**	3.24 (.46)	−.18 (36.4)
Yes	27	1.54 (.75)		3.12 (.57)		3.27 (.66)	
General medical provider							
No	77	1.32 (.65)	−1.23 (93)	2.80 (.71)	1.10 (93)	3.35 (.50)	−.37 (93)
Yes	18	1.54 (.77)		2.58 (.98)		3.58 (.59)	

		Timeline		Consequences		Perceived controllability	
	N	Mean (SD)	*t* (*df*)	Mean (SD)	*t* (*df*)	Mean (SD)	*t* (*df*)
Non-professional							
No	82	1.33 (.67)	−1.09 (93)	2.72 (.79)	−1.48 (93)	3.25 (.52)	.25 (93)
Yes	13	1.55 (.70)		3.05 (.54)		3.22 (.52)	

* $p \leq 0.05$,

** $p \leq 0.01$,

*** $p \leq 0.001$.

Table 4

Frequency of patients' responses to PARCD items (n = 95)

	Strongly disagree or disagree *n* (%)	Neither agree nor disagree *n* (%)	Strongly agree or agree *n* (%)
Items			
Health care provider interpersonal skills			
1. I trust that my doctor acts in my best interest	6 (6%)	6 (6%)	83 (87%)
2. My doctor listens to me	4 (4%)	6 (6%)	85(89%)
Treatment effectiveness			
3. Antidepressant medications restore depressed individuals to their normal level of functioning	14 (15%)	20 (21%)	61 (64%)
4. Counseling restores depressed individuals to their normal level of functioning	2 (2%)	13 (14%)	80 (84%)
5. Most antidepressant medications are effective in treating depression	13 (14%)	23 (24%)	59 (62%)
6. Counseling will help depressed individuals just as much as antidepressant medication	9 (10%)	15 (16%)	71 (75%)
Treatment problems			
7. Antidepressant medications are addictive	11 (12%)	26 (27%)	58 (61%)
8. Antidepressant medications make people feel drugged	25 (26%)	34 (36%)	36 (38%)
Expectation and knowledge of treatment			
9. I know what to expect regarding treatment of depression	15 (16%)	32 (34%)	47 (49%)
10. I have enough information to deal with depression	23 (24%)	19 (20%)	53 (56%)
Intrinsic spirituality			
11. Faith in God will heal depression	9 (10%)	3 (3%)	83 (87%)
12. Asking God for forgiveness will help heal depression	7 (7%)	15 (16%)	73 (77%)
Access to care			
13. I can afford mental health treatment for depression	43 (45%)	22 (23%)	30 (32%)
14. I have health insurance that will cover enough of the costs of depression care.[a]	72 (77%)	14 (15%)	8 (9%)

[a] One missing value was reported for this item.