Subjective Versus Objective: An Exploratory Analysis of Latino Primary Care Patients With Self-Perceived Depression Who Do Not Fulfill Primary Care Evaluation of Mental Disorders Patient Health Questionnaire Criteria for Depression

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Objective: Identification and treatment of depression may be difficult for primary care providers when there is a mismatch between the patient's subjective experiences of illness and objective criteria. Cultural differences in presentation of symptoms among Latino immigrants may hinder access to care for treatment of depression. This article seeks to describe the self-perceptions and symptoms of Latino primary care patients who identify themselves as depressed but do not meet screening criteria for depression.

Method: A convenience sample of Latino immigrants (N = 177) in Corona, Queens, New York, was obtained from a primary care practice from August 2008 to December 2008. The sample was divided into 3 groups according to whether participants met Patient Health Questionnaire diagnostic criteria for depression and whether or not participants had a self-perceived mental health problem and self-identified their problem as "depression" from a checklist of cultural idioms of distress. Psychosocial, demographic, and treatment variables were compared between the 3 groups.

Results: Participants' descriptions of symptoms had a predominantly somatic component. The most common complaints were *ánimo bajo* (low energy) and *decaimiento* (weakness). Participants with "subjective" depression had mean scores of somatic symptoms and depression severity that were significantly lower than the participants with "objective" depression and significantly higher than the group with no depression ($P < .0001$).

Conclusions: Latino immigrants who perceive that they need help with depression, but do not meet screening criteria for depression, still have significant distress and impairment. To avoid having these patients "fall through the cracks," it is important to take into account culturally accepted expressions of distress and the meaning of illness for the individual.

Prim Care Companion J Clin Psychiatry 2010;12(5):e1–e12

Submitted: *September 30, 2009; accepted December 15, 2009.*
Published online: *October 21, 2010 (doi:10.4088/PCC.09m00899blu).*
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Depression is the second most common disorder encountered in primary care.[1] Twelve percent of primary care patients have major depression, almost twice the prevalence found in the general population.[2] Depression disproportionately affects the most vulnerable populations,[3] including Latino immigrants, the elderly, and people with chronic illnesses.[4–8] Latino immigrants are less likely to receive treatment for depression than non-Hispanic whites,[4–6,8] and the care that is received is less likely to conform to treatment guidelines.[9,10] Moreover, these groups are most likely to seek care for mental health problems in the primary care setting.[10]

There is much debate over the appropriateness of the current *DSM-IV* classification of depression, particularly for those with depressive symptoms who do not meet criteria for major depressive disorder.[11] In primary care, the prevalence of milder but clinically disabling conditions, such as dysthymia and minor depression, is even higher than major depression.[12,13] Patients who do not meet the *DSM-IV* criteria for major or minor depressive disorder have been labeled with subthreshold depression, subclinical depression, or nonspecific depressive symptoms.[14,15] Compared to participants without depressive symptoms, participants with subthreshold depression have impaired functional status, higher rates of service use, increased economic costs to society, and a greater likelihood of developing major depression.[12,16–18] A recent primary care study showed promising results for the treatment of minor depression,[19] although further research is needed to determine if treatment is effective for subthreshold depression.[12,19,20]

It is difficult for the primary care clinician to determine the treatment implications of self-reports of depressive symptoms or self-perceived depression in the absence of a *DSM-IV* diagnosis, which might be assessed by such screening instruments as the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PHQ-9) for depression.[21] This is particularly true for patients whose culture differs from that of the provider.[22] An understanding of the experience and context of depression among Latino immigrants might be necessary to enhance

Clinical Points

- Among Latino immigrant groups, depression screening questionnaires may not accurately identify some individuals who have significant distress and impairment.
- An informal screening question about self-perceived mental health needs can assist in identifying individuals who may need treatment for depression.
- Primary care providers should elicit the patient's definition of a mental health problem, interpretations of the meaning of the problem, and expectations for treatment.

diagnostic accuracy.[22] Several studies have supported a spectrum theory of depressive syndromes with severity occurring along a continuum.[15] Self-reports of depressive symptoms that do not meet criteria for depression might represent one end of this spectrum and might serve as a target for preventive care. This article seeks to explore the nature of and possible treatment implications for a group of Latino primary care patients who identify themselves as depressed but do not meet PHQ-9 criteria for depression.

RECOGNITION OF DEPRESSION IN PRIMARY CARE AND AMONG LATINO PATIENTS

In addition to language barriers and lack of insurance among Latino patients, a major barrier to the treatment of depression includes a lack of recognition in the primary care setting in as many as 30%–50% of patients.[23,24] Lack of recognition may be due, in part, to components of the primary care infrastructure, such as high productivity quotas, which preclude in-depth assessment. This has led the US Preventive Services Task Force[25] to recommend screening for depression in primary care to improve the accurate identification of depressed patients. However, the reliability of screening may differ in certain subpopulations on the basis of culture.

There is much debate as to the extent to which culture influences the core diagnostic categories and constellation of symptoms for mental illnesses.[26] One element of this debate is whether psychiatric disorders are universal and biologically based, with specific cultural variations in expression of symptoms and manifestation,[11] or whether culture is the major determinant of the development of illness.[27]

There is less debate about how culture influences the validity of instruments used to assess illness. Various health status measures, including self-reported physical health, the Center for Epidemiologic Studies Depression scale (CES-D), and the somatic symptoms scale of the PHQ (PHQ-15), have been susceptible to cultural bias and lack of conceptual or language equivalence, which can lead to misclassifications when applying standard cutoffs.[28–32] Moreover, response bias, or differences in item characteristics by cultural tendencies to respond in a certain way, can affect validity.[33]

Cultural Influences on Illness Presentation

Insufficient provider training with regard to the patient's cultural differences in presentation may also create a barrier to recognition of depression.[9,34,] Among many cultural groups, including Latino patients, depression may be primarily experienced in bodily terms and result in the patient's perception of a physical problem for which primary care assistance is sought.[35,36] The patient's level of health literacy and the degree of stigma felt about discussing mental health problems may result in the use of "cultural idioms of distress" or descriptions of emotional disturbances that differ from Western biomedical terminology, such as *ataques de nervios*, *susto*, or *nervios*. *Nervios* is an idiom of distress referring to an "alteration" of the nervous system[9] and is characterized by depressive, anxious, somatic, and dissociative symptoms.[37]

Stress and Self-Perceived Distress

While Latino immigrants have been found to clearly recognize the phenomenon of depression, it is possible that it is not always defined as an illness.[38] Depression may be considered to be a predictable response to the preponderance of stressors Latino immigrants face.[38] The strong endorsement of immigration-related or acculturative stressors such as financial problems, loss of social networks, and trauma as causes of depression is discussed in a previous analysis of this data set.[39]

In sum, for various reasons, including differences in illness definition and presentation, the stigma of reporting depression among Latino immigrants, and cultural factors that may influence responses to screening instruments, providers may fail to detect depression in this population. The majority of Latino immigrants with depression are not receiving treatment[4]; therefore, it is important to develop an understanding of people who self-report that they have a mental health problem. The aims of this article are to (1) describe the self-perceptions of a group of Latino primary care patients who identify themselves as depressed but do not meet PHQ-9 criteria for depression (subjective depression), (2) describe the self-reported symptoms and the use of cultural idioms of distress of the group with subjective depression, and (3) compare the psychosocial, demographic, and treatment variables among those with subjective depression, those who meet PHQ-9 criteria (PHQ-depression), and those

who do not self-report depression and do not have a PHQ-9 diagnosis of depression (nondepression).

METHOD

Setting

This cross-sectional descriptive survey study took place at a private family practice site in Corona, Queens, New York from August 2008 to December 2008. Corona, Queens, has an urban population of 99,000, approximately two-thirds of whom are Latino and 62% are foreign born.[40] The ethnic background of Corona includes residents of Dominican (28%), Mexican (17%), Ecuadorian (15%), and Colombian (6%) descent.[41] One-quarter of the Hispanic residents in Corona live below the poverty level. The site was selected because of its predominantly Latino immigrant patient population and the particular demographic mix of the population. The fastest rate of growth in the United States Hispanic population is among the ethnic groups included in this study: Dominican, Colombian, and other Central and South American groups.[42] The focus on diverse Latino groups allowed for an analysis of differences by ethnicity.

Sample

The original sample for this study consisted of a convenience sample of self-identified Latino immigrants (N = 177) recruited from the waiting room of the family practice site. There was an equitable selection of participants since all patients were approached to enter the study upon registering for their appointments or while seated in the waiting room. Patients were approached with a brief introduction about the investigator, the purpose of the study, and the eligibility criteria and were given a bilingual flyer providing contact information. Patients were not approached during the time the investigator was in a private room conducting interviews. These patients were informed of the study via bilingual posters posted in the waiting room and at the registration desk.

Eligible participants endorsed that they were Latino, aged 18 years or over, patients at the practice, and born either outside of the United States or in Puerto Rico. The study received institutional review board approval from Yale University School of Nursing, New Haven, Connecticut. Informed consent documents contained information on the specific purposes of the study, potential risks and benefits, and permission to divulge to the primary care practitioner results of psychiatric screening and/or any other medical conditions requiring immediate attention. Informed consent and interviews were conducted in Spanish or English, according to language preference, in a private room to ensure confidentiality. Seven participants (4%) in the sample chose to be interviewed in English. All questionnaires and informed consent documents were read aloud to participants.

Measures

All measures used in this study had preexisting validated Spanish translations and utilized the back translation method.[42] Two independent native Spanish speakers translated instructions and consent forms. The investigator pretested and/or reviewed the measures for comprehension and usage among monolingual Spanish speakers from Mexico, Guatemala and Puerto Rico, the Dominican Republic, Ecuador, and Colombia.

The dependent variable, depression status, was assessed by the PHQ, a screening instrument developed for use in primary care settings that screens for anxiety disorders, alcohol abuse, and depression.[43] The depression module (PHQ-9),[21] is a 9-item scale that assesses all *DSM-IV* depression symptoms during the last 2 weeks. Severity of complaints ranges on a 4-point scale from "not at all" (0) to "nearly every day" (3). Presence or absence of depression is determined by a diagnostic algorithm that must include either depressed mood or anhedonia for at least "more than half the days" and at least 2 other symptoms for at least "more than half the days." By convention, presence of 5 additional symptoms is defined as "major depression," whereas 2 to 4 additional symptoms are defined as "other depression."[22] Depression severity was calculated as a continuous variable by scoring the response categories from 0 to 3 for scores ranging from 0–27. Scores of 5, 10, 15, and 20 are the recommended cutoff points for mild, moderate, moderately severe, and severe depression, respectively.[22] In a sample of primary care patients, there was a sensitivity of 88% and a specificity of 88% for major depression at a score ≥ 10 based on a structured clinical interview.[22] Although many studies use a score ≥ 10 (moderate or more severe depression), we used the less conservative score of ≥ 5 (at least mild depression), because one of the purposes of this study was to determine who was being "missed" by the screening.[44] Internal consistency and test-retest reliability was excellent at 0.89 for the English version.[21]

The Spanish version of the PHQ has been validated in 974 Hispanic primary care and obstetrics/gynecology patients of whom 74% were monolingual Spanish speaking (n = 717).[22] Compared with the United States primary care sample, 3 studies in Spanish-speaking countries showed similar sensitivity ranging from 77%–87% and specificity ranging from 88%–100%.[45–47]

List of illness labels. Participants who said "yes" to a past-month mental health problem or who endorsed fair or poor self-perceived mental health were asked to identify the nature of the problem from a list of illness labels that included symptoms and experiences such as loneliness, family problems, and problems with drugs or alcohol. This list

was previously used in a study of depression self-recognition[48] and was adapted from Yokopenic et al.[49]

This list was expanded by incorporating the cultural idioms of distress suggested in the *DSM-IV*[11] such as *nervios* (nerves), *ataques de nervios* (attacks of nerves), *agitación* (agitation), and *decaimiento* (weakness). During the pilot study, a few items were dropped from the interview if the majority of participants had not heard of the expressions. Subsequently, if these items had not been endorsed by any of the first set of participants, they were dropped from the interview, ie, *pasmo* (fright, soul loss). Additionally, *coraje* (rage, anger) was added to the list as a cultural idiom of distress, because it was volunteered by a majority of the participants during the initial interviews. Similarly, *agitamiento* (agitation, nervousness) was changed to *agitación* based on participants' word recognition.

Experience of symptoms. Participants who said "yes" to having experienced a past-month mental health problem or who endorsed fair or poor self-perceived mental health were asked about their experience of symptoms by the open-ended question, What do you feel like when you have?"

Independent variables. Independent variables included the demographic variables listed in Table 1. Demographic variables included age, gender, income level, educational level, employment status, ethnicity, and the acculturation variables of language usage and number of years in the country. Psychosocial variables listed included perceived stigma and acculturative stress. The clinical/treatment variables included the variables somatic symptoms, severity of depression, functional status, previous history of treatment, and previous history of help seeking for mental health problems by the participant or his/her family or friends.

Spanish- or English-language usage. Language usage was assessed by the following question scored from 1 to 5 with higher scores reflecting greater English-language usage, "Do you speak Spanish only, mostly Spanish (some English), Spanish and English about the same, mostly English (some Spanish), or English only?"

Perceived stigma. Perceived stigma contained 3 items reflecting the belief that the participant would be stigmatized by employers, friends, or family if he/she sought treatment for depression. These questions were used in a large-scale Internet study on depression[50]; however, minimal psychometric data are available for these questions. In the current sample, Cronbach $\alpha = 0.71$, mean = 8.5, SD = 3.8, with a range of 3–15 (higher scores indicating greater stigma).

Acculturative stress was measured by the abbreviated version of the Hispanic Stress Inventory for Immigrants,[51] a shorter version of the Hispanic Stress Inventory-Immigrant version.[52] The abbreviated version is a 17-item questionnaire designed to assess stressors specific to the Latino immigrant experience, such as immigration, discrimination, family, and cultural issues. In a study of 143 Latino immigrants in the St. Louis, Missouri, area, internal consistencies were 0.86 and 0.87 for the 2 factors of the scale, intrafamilial stress and extrafamilial stress.[51]

Somatic symptoms. The somatic symptoms scale of the PHQ[43] contains 15 items about physical complaints that have been shown to be the most common somatic symptoms, including, for example, stomach pain, back pain, headaches, chest pain, and shortness of breath. The items are rated from 0, 1, and 2 corresponding to "not at all," "bothered a little," and "bothered a lot." Cronbach α for both Hispanics and non-Hispanics was 0.79.[30]

Functional status. Functional status was assessed by the single question on the PHQ, "How difficult have these problems made it for you to do you work, take care of things at home, or get along with other people?" It is scored on a 4-point scale ranging from "not at all difficult" to "extremely difficult." This question was associated with functional impairment on the mental health subscale of the 20-item Medical Outcomes Study Short-Form General Health Survey scales with a correlation of 0.53.[43]

Data Analysis

A subsample was selected for purposes of this analysis. The subsample (n = 161) consisted of 3 groups: PHQ-depression, subjective depression, and nondepression.

PHQ-depression (n = 47) included participants who met PHQ-9 diagnostic criteria for depression (major or other) or were currently being treated for depression and therefore would not be considered "missed" or "nonrecognized."

Subjective depression (n = 21) included participants who were not in current treatment for depression, did not meet PHQ-9 diagnostic criteria for depression, and endorsed either a "yes" response to (1) or a "fair" or "poor" rating to (2) as follows:

(1) In the past month, have you ever had personal, emotional, behavioral, mental, or alcohol or drug problems severe enough that you felt you needed help?[48]
(2) Self-rated mental health: how would you rate your overall mental health—excellent, good, fair, or poor?[53]

Subjective depression was additionally defined by either the identification of depression from the list of illness labels or a response, indicating predominantly depressive symptoms, such as *tristeza* (sadness) or *depresión* (depression) to the open-ended question, "How do you feel when you have the above-mentioned problem?" The 16 participants who had a self-perceived mental health problem but did not endorse an illness label of depression or symptoms of depression (eg, stated

Table 1. Characteristics of 161 Latino Patients From a Primary Care Practice[a]

Variable	Sample
Demographic	
Age, y	
18–49	79 (49)
Gender	
Female	119 (74)
Income level	
< $10,000	58 (36)
$10,000–$19,999	57 (35)
≥ $20,000	34 (21)
Refused or don't know	12 (7)
Education level	
≤ 8th grade	39 (24)
Some high school	51 (32)
General equivalency diploma or high school	32 (20)
Some college or technical school	21 (13)
College graduate or graduate school	18 (11)
Ethnicity	
Dominican	84 (52)
Ecuadorian	27 (17)
Colombian	20 (12)
Other Central/South American	30 (19)
Work status	
Full-time	55 (34)
Part-time	28 (17)
Out of work force (retired, student, disability)	29 (18)
Unemployed	49 (30)
Acculturation	
Age at migration, mean (SD), y	29.0 (12.1)
Years in country	
0–5	17 (11)
6–10	10 (6)
11–15	24 (15)
16–20	26 (16)
> 20	83 (52)
Language	
Spanish only	49 (30)
Mostly Spanish (some English)	89 (55)
Spanish and English about the same—mostly English	23 (14)
Clinical	
Presence of depression	47 (29)

[a]Data are presented as n (%) unless otherwise specified.

that their mental health problem was "memory loss, drug abuse, or alcoholism") were not considered in the analysis.

Nondepression (n = 93) included participants who did not meet PHQ criteria for anxiety, depression, or alcohol abuse; were not in current treatment for any psychological disorders; and endorsed a "no" response to (a) above and a "good" or "excellent" rating to (b) above.

Analyses were conducted in SAS version 9.1 (SAS Institute Inc, Cary, North Carolina). We used univariate analyses, eg, frequencies, means, and distributions to describe the demographic, psychosocial, and clinical/treatment characteristics of the sample, as well as to characterize the frequencies of endorsement for specific illness labels and responses to the open-ended questions.

We examined differences between the mean scores on the continuous variables using analysis of variance and Duncan's test for pairwise comparisons. The .05 significance level was applied.

We examined the differences in distributions of psychosocial, demographic, and clinical/treatment categorical variables first between the group with subjective depression and the group with PHQ-depression and second between the group with subjective depression and the nondepression group using the χ^2 test or Fisher exact test depending on cell size.

RESULTS

Demographic and clinical characteristics of the sample are presented in Table 1. The largest ethnic group in this sample was of Dominican origin, followed by those of Ecuadorian and Colombian origin. The majority of the sample (71%) had an income of under $20,000 annually, with 36% earning less than $10,000 a year. The majority (approximately 85%) of the practice's patient population was enrolled in Medicaid health maintenance organizations. The remainder of the population received Medicare or private health insurance or, in a few cases, were self-paying (Enrique Malamud, MD, personal communication, July 7, 2008). About half of the sample was employed either part-time or full-time, and approximately 30% of the sample was unemployed. The majority was monolingual Spanish speaking or spoke very little English (85%). Of the population, 29% had depression by PHQ-9 criteria, including those with scores ≥ 5, indicating at least mild depression.

Compared with Ecuadorian, Colombian, and other Central and South American patients, participants from the Dominican Republic were more likely to be monolingual Spanish speaking and to have a lower income and less than an eighth grade education. Dominican participants were more than twice as likely to be out of the work force as the other ethnic groups (26% vs 12%). The refusal rate for participation varied from approximately 75% initially to about 10% by the end of the study.

Subjective Descriptions of Illness

Descriptions of illness included those items endorsed on the list of illness labels and the responses to the open-ended question on symptoms. Among the group with subjective depression, illness labels were relatively similar in order of frequency as those endorsed by the PHQ-depression group; however, the PHQ-depression group had a higher percentage of endorsements for most items (Table 2). Among those with subjective depression, the most highly endorsed symptoms and idioms of distress were *sentir el animo bajo* (low energy), n = 21 (100%); *decaimiento* (weakness), n = 18 (86%); depression, n = 17 (81%); loneliness, n = 16 (76%); and anxiety and financial problems, each n = 15 (71%).

Verbal responses to the question, "How do you feel when you have (any of the above problems)?" were transcribed and are listed by thematic content in Table

Table 2. Endorsement of Illness Labels Among Patients in the Subjective Depression (n = 21) and PHQ-Depression (n = 31) Groups[a,b]

Label	Subjective Depression, n (%)	PHQ-Depression, n (%)
Sentir el ánimo bajo (low energy)	21 (100)	30 (97)
Decaimiento (weakness)	18 (86)	30 (97)
Depression	17 (81)	31 (100)
Soledad (loneliness)	16 (76)	27 (87)
Ansiedad (anxiety)	15 (71)	30 (97)
Financial problems	15 (71)	25 (81)
Nervios (nerves)	14 (67)	27 (87)
Tension	14 (67)	28 (90)
Family problems	12 (57)	22 (71)
Agitación (agitation)	11 (52)	22 (71)
Coraje (rages)	11 (52)	24 (77)
Susto (fright)	8 (38)	23 (74)
Espanto (sudden fear)	4 (19)	16 (52)
Other	3 (14)	4 (13)
Pánico (panic)	3 (14)	14 (45)
Ataques de nervios (nervous attacks)	2 (10)	7 (23)
Perdida del alma (soul loss)	2 (10)	9 (29)
Tripa ida (insides disappearing)	1 (5)	9 (29)
Problems with alcohol	1 (5)	0 (0)
Problems with drugs	0 (0)	0 (0)

[a]Spanish language was used for cultural idioms of distress in both English and Spanish versions of the interview.
[b]Of the 47 participants in the PHQ-depression group, only 31 endorsed having a mental health problem.
Abbreviation: PHQ = Patient Health Questionnaire.

3. Reponses were noted in the language of preference. Of the 21 people with subjective depression, 2 were bilingual and 2 preferred English as the language of interview. Responses for most people clearly indicated distress and were consistent with *DSM-IV* criteria for depression. Themes were overlapping and focused predominantly on the symptoms of crying, depression and sadness, anxiety, nervousness, and tension and the experiences of loneliness, personal losses, and trauma.

Comparison of Variables by Depression Status

As shown in Table 4, participants with subjective depression had mean scores of somatic symptoms and depression severity that were significantly lower than those of participants with PHQ-depression and significantly higher than those of the nondepression group. The nondepression and subjective depression groups did not differ from each other in terms of perceived stigma and acculturative stress, but both were significantly lower on these 2 variables than those with PHQ-depression.

Bivariate comparisons between the subjective depression and PHQ-depression groups indicated that only the clinical/treatment characteristics were significantly different (Table 5). Compared to the PHQ-depression group, the subjective depression group was less likely to have had chronic illnesses. There were no differences between the groups in terms of demographic factors such as gender, employment status, age, or the acculturation factor of language usage. The subjective depression group compared to the nondepression group was significantly more likely to have had previous treatment for a mental health problem, to have impaired functional status, and to have "fair" or "poor" self-rated physical health. Although not statistically significant, there was a trend for the subjective depression group to have been residing in the United States for a shorter period of time and to have had a greater likelihood of having family members or friends who had received mental health treatment than the PHQ-depression group.

DISCUSSION

The goal of this study was to explore the meaning of Latino patients' self-perceptions of depression and the clinical implications of these perceptions. The findings of significant impairment of functional status and worse self-perceived physical health among those with subjective depression compared to those who do not have self-perceived mental health problems are similar to the findings of studies of subthreshold depression in primary care.[16,18] Participants with subjective depression had mean scores between those with PHQ-depression and the nondepression group in terms of somatic symptoms and depression severity, thus supporting the spectrum hypothesis of depression.[12]

In general, when probed with an open-ended question, subjective descriptions of symptoms very closely matched the *DSM-IV* criteria for depression.[11] Nevertheless, participants' illness labels had a predominantly somatic component, similar to the findings of other researchers.[22,54–56] The most common symptoms of depression were *ánimo bajo* (low energy) and *decaimiento* (weakness). In a community survey of 166 Puerto Rican residents of Worcester, Massachusetts, the most commonly endorsed symptoms of mental health problems were *decaimiento* (56.2%), *nervios* (50.6%), and *agitamiento* (40.7%), supporting the commonality of these idioms of distress and symptoms to describe mental health problems.[57] Anxiety, tension, and nerves were reported by the majority of participants and indicated the prevalence and overlap of these symptoms with symptoms of depression, similar to the descriptions of depression among elderly Puerto Rican and Dominican subjects[58] and among Puerto Rican women.[22]

To our knowledge, this is the first study to examine the construct of subjective depression among Latino patients in primary care. A few prior studies have examined the related construct of self-recognition of depression, defined as participants who believe that they are depressed and meet the criteria for depression. These studies also indicated that the most salient factors related to self-recognition were clinical factors including severity of illness, suicidality, history

Table 3. Description of Symptoms by Study Participants

Theme	Response
Crying	*Me dan ganas de llorar, trato de solucionar los Nervios*. I feel like crying, I try to settle the nerves.
	Me ponía a llorar, soy muy sentimental, tengo problemas con mi esposo, con mis hijos y trato de arreglar la situación pero no me escuchan. Un sentimiento de soledad. I started crying, I am very emotional, I have problems with my husband, with my children, and I try to straighten out the situation, but they don't listen to me. I have a feeling of loneliness.
	Tenía un hermano que sufrió de depresión y se mató. A veces lloro, una cosita pasajera a veces, se me olvidan muchas cosas, me pongo nerviosa y hago las cosas desesperada, como fregada, quizás. I had a brother that suffered from depression and he killed himself. At times I cry over a temporary passing thing. At times, I forget a lot of things, I become nervous, and I do desperate things, like I'm messed up, maybe.
Depression, sadness, emptiness	*Pensamientos sobre cosas del pasado, mucha tristeza, deprimida*. Thoughts from the past, a lot of sadness, depressed.
	Siento tristeza en mi alma, si alguien me dice que tengo una depresión…me siento muy sola, no deseo comer, no soy la misma, traté de explicárselo al doctor, pero falto el tiempo. I feel like I have sadness in my soul, when someone tells me that I have a depression. I feel so alone. I don't want to eat, I am not the same. I tried to explain it to the doctor, but I didn't have enough time.
	I don't want to be alive, emptiness, purposelessness.[a]
	Depresiva, me veo sola, me voy a la calle, como en la calle encuentro una amiga, trato de distraerme. Depressive, I see myself as alone, I go outside, because on the street I might find a friend and I try to distract myself.
	Triste, mal, sin deseo de nada, una tristeza profunda. Sadness, bad, like this, without desire for anything, a deep sadness.
	Siento un poquito de depresión porque estoy con esta incapacidad, de eso la viene la depression. I feel a little depressed because of this disability; this is what causes my depression.
Worry, tension, anxiety, stress	*Me da insomnio, me preocupo mucho por mis hijos*. I have insomnia. I worry a lot about my children.
	Stressed and tired, from work, being a father.[b]
	Preocupado, porque mi novia está embarazada. Worried, because my girlfriend is pregnant. *She doesn't want to live with me. Normally, I'm okay*.[c]
	Un poquito de ansiedad, me siento muy triste. I feel a little anxious, I feel very sad.
	Tengo miedo de que voy a morir, podría tener una enfermedad grave. I'm afraid that I'm going to die, that I could have a serious illness.
Nightmares, hearing voices	*Porque estoy sin trabajo, soy y no estoy, me dan muchas pesadillas, oigo voces, no quiero salir, paso los días sola, pienso muchas cosas malas*. Because I am without work, I am here, but I don't exist, I have a lot of nightmares, I hear voices, I don't want to go out, I spend the days alone, I think a lot of bad things.
Weakness	*Decaído, sin ánimo, triste*. Weak, without energy, sad.
Loneliness	*Vivo solo, me siento triste, cuando llamo al Perú y hablo con mis primos, se portan mal y tengo que regañarlos*. I live alone, I feel sad, when I call Peru and speak with my cousins, they are behaving badly and I have to chastise them.
	Me siento sola, con ganas de llorar, quisiera tener alguien con quien poder desahogarme, pero no lo tengo. I feel alone, I feel like crying, I would have liked to have someone with whom I could unburden myself, but I don't have anyone.
Personal losses, trauma	*En el sueño me pongo como tensa, no puedo dormir. Me siento sola porque he perdido mucho … muchos golpes en mi familia, he perdido mis hermanos*. When I'm sleeping, I feel like tense, I can't sleep. I feel alone because I have lost a lot…many blows to the family, I have lost my brothers.
	Un poco deprimida, perdí un hijo hace trece años, tengo ganas de llorar, me siento de mal humor, me voy a la iglesia, a veces no quiero hablar con nadie. A little depressed, I lost a son 13 years ago, I feel like crying, I feel like I'm in a bad mood, I go to the church, at times I don't want to talk to anyone.
	Nunca se borran de la mente estos recuerdos, no tenia ayuda de nadie, uno se siente traumatizado, por eso me vine a este país. These memories can never be erased from my mind, I didn't have help from anyone, one feels traumatized, because of this, I came to this country.

[a]Participant interviewed in English.
[b]Participant interviewed in English.
[c]Participant interviewed in English and Spanish.

of self or family/friend mental health treatment, and poor self-perceived mental health.[48,50,53,59]

Nevertheless, the absence of significant findings in terms of demographic factors such as gender or level of acculturation is not entirely consistent with previous research. Gender has been shown to influence self-recognition of emotional problems. Although Puerto Rican men have been shown to have less self-recognition of emotional problems than women[53] and Latino men are less likely to seek help for depression, anxiety, and substance abuse than Latina women,[6,10] results of this study showed no gender differences in subjective depression. Perhaps the study provided an informal or less intrusive means of help seeking or discussion of depression than the more traditional and potentially stigmatizing route of discussing mental health problems with one's provider. However, a careful examination of help-seeking behavior by gender is beyond the scope of this article.

Increasing level of acculturation, whether measured by greater proficiency in the English language or specific acculturation scales, is believed to influence perceptions about depression. Knowledge of the English language results in greater exposure to media, pharmaceutical

Table 4. Analysis of Continuous Variables by Depression Status[a,b]

Variable	PHQ-Depression (n = 47 [29%])	Subjective Depression (n = 21 [13%])	Nondepression (n = 93 [58%])	*P* Value
Perceived stigma	10.1 (3.9) A	8.4 (4.0) B	8.0 (3.3) B	.0046
Severity of depression	14.4 (6.1) A	5.9 (3.7) B	1.8 (2.1) C	< .0001
Somatic symptoms	13.0 (6.0) A	8.0 (5.1) B	4.6 (3.5) C	< .0001
Acculturative stress	29.4 (16.1) A	16.9 (14.9) B	12.9 (13.1) B	< .0001

[a]Data are presented as mean (SD).
[b]Variables with the same letter (A, B, or C) are not significantly different.
Abbreviation: PHQ = Patient Health Questionnaire.

Table 5. Analysis of Categorical Variables by Depression Status

Variable	PHQ-Depression (n = 47 [29%]) 0	Subjective Depression (n = 21 [13%]) 1	Nondepression (n = 93 [58%]) 2	*P* Value 1 vs 0[a]	*P* Value 1 vs 2[b]
Demographic					
Age, n (%), y				.557 (NS)	.879 (NS)
18–49	21 (45)	11 (52)	47 (51)		
≥ 50	26 (55)	10 (48)	46 (49)		
Gender, n (%)				.773 (NS)	.880 (NS)
Male	12 (24)	5 (24)	25 (27)		
Female	35 (76)	16 (76)	68 (73)		
Work status, n (%)				.770 (NS)	.341 (NS)
Full-time or part-time	18 (38)	10 (48)	55 (59)		
Out of work force, retired, student, disability	13 (28)	5 (24)	11 (12)		
Unemployed	16 (34)	6 (29)	27 (29)		
Income level, n (%)				.222 (NS)	.980 (NS)
< $10,000	22 (48)	6 (33)	30 (35)		
$10,000–$19,999	19 (41)	7 (39)	31 (36)		
≥ $20,000	5 (11)	4 (28)	25 (28)		
Education level, n (%)				.184 (NS)	.153 (NS)
≤ 8th grade	15 (32)	6 (29)	18 (19)		
Some high school	15 (32)	3 (14)	33 (35)		
High school graduate/graduate school	17 (36)	12 (57)	42 (45)		
Ethnicity, n (%)				.531 (NS)	.711 (NS)
Dominican	23 (49)	12 (57)	49 (53)		
Other Central/South America	24 (51)	9 (43)	44 (47)		
Acculturation					
Years in country, n (%)[c]				.083 (NS)	.303 (NS)
> 20	28 (61)	8 (38)	47 (50)		
0–20	18 (39)	13 (62)	46 (49)		
Language, n (%)					
Spanish only	18 (38)	5 (24)	26 (28)	.234 (NS)	.924 (NS)
Mostly Spanish (some English)	26 (55)	12 (57)	51 (55)		
Spanish and English the same—mostly English	3 (6)	4 (19)	16 (17)		
Clinical/treatment					
Function, n (%)				.109 (NS)	< .0001
Somewhat to extremely difficult	32 (68)	10 (48)	5 (5)		
Not at all difficult	15 (32)	11 (52)	88 (95)		
History of family/friend mental health treatment, n (%)					
Yes	13 (28)	10 (48)	32 (34)	.108 (NS)	NS (.257)
No	34 (72)	11 (52)	61 (66)		
Self-rated physical, n (%)					
Good/excellent	12 (26)	4 (19)	63 (68)	.759 (NS)	< .0001
Fair/poor	35 (74)	17 (81)	30 (32)		
Chronic illness, n (%)					
Yes	36 (77)	10 (48)	47 (51)	.0183	.809 (NS)
No	11 (23)	11 (52)	46 (49)		
Previous treatment for depression, anxiety, or substance abuse, n (%)					
Yes	22 (47)	8 (38)	11 (12)	.504 (NS)	.0035
No	25 (53)	13 (62)	82 (88)		

[a]Subjective depression vs PHQ-depression.
[b]Subjective depression vs nondepression.
[c]One participant was unable to recall number of years in the country.
Abbreviations: NS = not significant, PHQ = Patient Health Questionnaire.

advertising, and public health campaigns designed to educate the public about mental health and has brought about increases in mental health service usage.[3,60] However, acculturation does not occur in a linear fashion, and contextual factors, such as living in a predominantly monolingual Spanish-speaking ethnic enclave, may have a culturally protective effect and can influence the process of acculturation, particularly for immigrants who have entered the country as adults.[61] Further research could more closely examine the relationship between problem recognition and help-seeking behavior as well as the effects of acculturation, gender, ethnicity, and other demographic factors on recognition of mental health problems.

There are a number of possible explanations for the lack of congruence between *DSM-IV* criteria and subjective depression. First, due to predominantly somatic presentations, participants may not have met PHQ criteria for depression. Among Latino subjects, somatic symptoms, tension, and anxiety may be endorsed more frequently than "depressed mood" compared to non-Hispanic whites, as suggested in the literature[27] and evidenced by people's reluctance to endorse sadness and depression more than just "some of the time." The hesitance to report severity of illness in terms of "number of days" experiencing depressive mood symptoms may be characterized as a response set bias, possibly due to strong social mores prohibiting reporting of negative mood states[22] and the economic imperatives of not being able to lose work due to illness.[4]

Second, it is also possible that since the group with subjective depression experienced less perceived stigma about depression than those with PHQ-depression, they may have been more willing to label themselves as depressed at a lower level of depression severity and thus may be a group amenable to preventive interventions. Third, the 38% of the subgroup with subjective depression who had been treated in the past may not have achieved full remission and were reflecting residual symptoms, a recurrent episode of depression, or dysthymia. Finally, due in part to the response set biases mentioned previously, we may not have enough evidence of validity of the PHQ-9 among the following groups of latinos: male and middle-aged and elderly adults.

The PHQ-9 has been validated in 3,000 primary care patients, of whom 4% were Hispanic, and 3,000 obstetrics-gynecology patients, of whom 39% were Hispanic.[21] In these studies, the samples of Hispanic subjects were overwhelmingly female (97.8%) and young (mean age of 29 years). Criterion validity by means of an independent standard such as the Structured Clinical Interview for *DSM-IV*[62] was not performed for monolingual Spanish speakers.

Clinical and Public Health Implications

Depression screening and assessment. These findings suggest that people endorsing some symptoms of depression on the PHQ-9, but not enough to trigger a diagnosis, should be evaluated clinically for other factors that may affect decisions about management and treatment. As suggested by Spitzer et al,[43] potential questions to enhance accuracy of diagnosis include the following:

- Have current symptoms been triggered by psychosocial stressor(s)? If, so how?
- To what extent are the patient's symptoms impairing his or her usual work and activities?
- Is there a history of similar episodes, and were they treated?
- Is there a family history of similar conditions?
- Are there other comorbid psychological problems (eg, anxiety, panic attacks, or substance abuse)?
- How severe is the depression?

To help in identifying those patients with symptoms of depression who do not meet PHQ-9 criteria, an informal screening question about self-perceived mental health needs (such as that used in this study) might be advisable. More frequent screening may be most productive in patients with a history of depression, chronic illness, unexplained somatic symptoms, comorbid psychological conditions (eg, panic disorder or generalized anxiety), substance abuse, chronic pain, high levels of stress, and recent losses.[25]

Communication strategies and patient education. To provide culturally appropriate services, the primary care provider should be aware of and discuss the patient's belief systems, illness interpretations, and expectations of treatment. The framework for conversation can utilize the ESFT model,[63] which would include the patient's **E**xplanatory model of illness, **S**ocial and financial barriers to illness treatment, **F**ears and concerns about treatment, and **T**herapeutic contracting and playback.

For the patient who acknowledges having a mental health problem, the provider should elicit the patient's definition of the problem and reflect the patient's illness label, rather than impose a diagnostic category of depression. Somatic symptoms should be explored to ascertain the patient's understanding of these symptoms. These physical symptoms can be validated and presented as a manifestation of the presenting problem or current stressors by using open-ended questions.[27] Psychoeducation should address beliefs contributing to stigma and mental health literacy. If the patient is willing, family members may be included in treatment planning.[27]

Limitations

The sample consisted of an immigrant primary care population from different Latin American countries, which limits the possibility of generalizing to all Latino primary care populations in the United States. The small sample size of the subjective depression group may have limited the power of this study to detect significant differences between groups. The homogeneity of the group in terms of an overwhelming preference for Spanish as the language of interview precluded an exploration of the role that language might play in the reporting of symptoms. The study is further limited by a convenience sampling strategy and a variable refusal rate. Similar to the findings of other researchers working with Latino immigrant populations,[64,65] participants were initially wary of the investigator and, per staff report, believed that the investigator was from the Immigration and Naturalization Service. To counter this initial mistrust, the investigator employed a culturally syntonic methodology similar to the *plática* methodology,[65] which relied upon staff members familiar to potential participants to vouch for the trustworthiness of the researcher. By the end of the recruitment period, when the investigator was well known to the potential participants, some of whom had already participated in the study, the refusal rate was minimal. Due to Health Insurance Portability and Accountability Act regulations and the need to protect patient privacy, only minimal eligibility data were obtained from potential participants in the waiting room, and no other personal identifying information was obtained from nonparticipants that could subsequently be used to compare participants with those who refused to participate.

The finding of 47 participants with a PHQ-9 score indicative of depression or current treatment for depression does not represent prevalence of depression in the clinic, because patients were not randomly sampled. Some patients may have self-selected into the study in order to be screened or to obtain help for depression or, alternatively, may have elected not to participate to avoid detection of depression. Nevertheless, 29% (26% of the full sample of 177) is within the range of results of other primary care studies of Latino immigrants and low-income primary care patients.[57,66,67] Although, the PHQ-9 is based on *DSM-IV* criteria and shows high agreement with clinical diagnosis as evidenced by an overall accuracy rate of 88%, the absence of a clinical interview to verify the PHQ-9 results obtained here may mean that some participants may have been misclassified as "depressed" or "not depressed." Moreover, the PHQ-9 cannot distinguish depression from dysthymia. It also does not screen for substance abuse, and, therefore, this potential diagnosis could not be carefully examined. Since this is a primary care population, it would be assumed that there is some overlap of somatic and psychiatric comorbidities, so one cannot definitely discern if impairment is due to chronic illness or symptoms of depression. Finally, the cross-sectional design of this analysis precludes identification of the causal directions of the variables under study.

CONCLUSION

Our research supports the idea that Latino immigrants who perceive that they need help with depression but do not meet screening criteria for depression still have significant distress and impairment. For some patients, subjective depression or self-perceived mental health may be as reliable an indicator of depression status as the currently used screening instruments. To avoid having these patients "fall through the cracks," it is important to take into account culturally accepted expressions of distress, the meaning of illness for the individual, and the effect of the illness on lifestyle, behaviors, functioning, and social activities. Given the above limitations, this study contributes to the literature by quantitatively and qualitatively exploring Latino immigrants' self-descriptions of emotional distress.

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Potential conflicts of interest: None reported.
Funding/support: This research was partially supported by a grant from Sigma Theta Tau International Honor Society of Nursing, Indianapolis, Indiana.
Acknowledgments: Special thanks to Joshua Farkovits; Tatiana Castrillon; Monica Diaz; Enrique Malamud, MD; Marta Miguez; Jasmine Ramos; Romana Suero, MA; and Johanna Tudino, all of Privileged Care Medical Center, Elmhurst, New York, and Gabriela Rosas-Garcia, MD, from the Department of Medicine, Infectious Diseases Fellowship Program, State University of New York Downstate Medical Center, Brooklyn. The acknowledged individuals report no conflicts of interest relevant to the subject of this article.

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