

# **GENERAL SECTION**

## Original Research Article

# An Examination of Cultural Values and Pain Management in Foreign-Born Spanish-Speaking Hispanics Seeking Care at a Federally Qualified Health Center

Calia A. Torres, MA,\* Beverly E. Thorn, PhD,\* Shweta Kapoor, MD, PhD,† and Colette DeMonte, PsyD<sup>‡</sup>

\*Department of Psychology, The University of Alabama, Tuscaloosa, Alabama; †Department of Psychiatry and Behavioral Sciences, McGovern Medical School, University of Texas Health Science Center, Houston, Texas; †Pacific Rehabilitation Centers, Seattle, Washington, USA

Correspondence to: Calia A. Torres, MA, The University of Alabama, College of Liberal Arts and Sciences, Department of Psychology, PO Box 870348, Tuscaloosa, AL 35487-0348. Tel: (205)-348-5083; Fax:(205)-348-8648; E-mail: catorres@crimson.ua.edu.

### **Abstract**

Objective. Most studies done with Hispanics illustrate their preference for self-management practices; therefore, examining the factors driving patients to seek medical care for pain management will help elucidate what patients want and need from their doctors for pain management. The aim of the present study was to obtain patients' perspectives and enhance our understanding of the cultural beliefs influencing pain management decisions of foreign-born Spanish-speaking Hispanics with low acculturation.

Methods. Twenty-four individuals (17 females and 7 males) with self-reported chronic pain completed the study. Participants attended a focus group and shared about pain management practices and their experiences with medical care for pain management. Descriptive data on pain and mood variables were collected to examine how this population compares with the norms reported in the pain literature for Hispanics.

Results. Participants reported a preference for pain self-management and noninvasive medical treatments and expressed negative attitudes toward pain medications, although wanting the option of pain medications as a "last resort." Satisfaction with medical care for pain was highly influenced by the participants' expectations and preference for personal, warm, and friendly interactions.

Conclusions. Our findings are consistent with previous reports on Hispanics' preference for self-care practices. Perhaps foreign-born Hispanics may rely on self-care practices and delay medical attention for pain management because of their unfamiliarity with the US health care system. Other potential explanations for a reliance on self-care for pain management involve patients having a limited understanding of or access to effective treatment options for chronic pain and negative experiences with US medical providers.

Key Words. Pain Management; Disparities, Ethnic; Primary Care; Hispanics; Qualitative Methods

### Introduction

Chronic pain is a significant public health problem affecting over 100 million Americans; it is one of the leading causes of disability and burgeoning health care costs [1]. Chronic pain is a physically, emotionally, and financially burdensome condition [1]. Despite its high prevalence and detrimental impact, chronic pain remains poorly understood and treated. A large proportion of individuals affected by chronic pain reports inadequate pain management. Moreover, empirical evidence suggests that ethnic and racial minorities are substantially more affected by disparities in the assessment and treatment of chronic pain [2–5].

Extant literature suggests that, as compared with other ethnic groups, Hispanic patients are more likely to have their pain underestimated by physicians, to receive less medication, to be prescribed lower analgesic dosages,

and to be recommended for joint replacement surgery [3,6,7]. It is a common perception that the Hispanic community holds beliefs about pain and pain medications that contribute to such disparities, including a fear of addiction, stoicism, preference for folk remedies, and religious beliefs that pain is "God's will" [8–14]. Although there is some influence of cultural beliefs on Hispanics' reluctance to take pain medication, there is a dearth of empirical inquiry focused on understanding the Hispanic patients' attitudes and beliefs about other treatment modalities for chronic pain, and how such beliefs and attitudes are reciprocally affected by the common practices of the US health care system and provider behavior.

The trajectory model of health lends itself to a unique approach to understanding health disparities and the contributing factors that influence the health of immigrants over time. Migration experience, social adjustment, health knowledge, and perceived discrimination are important domains that work together and contribute to the health disparity trajectory among immigrant and minority populations [15]. This framework recognizes that inequalities in health care are always influenced by the combined effect of home-country situations, the immigration experience, and adjustments to a new country [15]. The medical encounter is a critical point in the delivery of care and presents an interesting opportunity to examine how patients make decisions about their health and help identify access barriers. Hispanics prefer self-management practices before seeking care due to a complex combination of inter- and intrapersonal nature [8,9,10,14,16]. Therefore, investigating what factors drive Hispanic patients to seek medical attention for pain management will help elucidate what they want and need from their doctors for pain management during a medical encounter. Further understanding could provide additional information about potential factors contributing to pain disparities and inform future efforts to target barriers and facilitators to optimal pain management.

Hispanics are less likely to seek medical care in a timely matter, and when they do they are more likely to turn to community health centers than physician offices for their health care needs [17,18]. In many states, federally qualified health centers (FQHCs) play a primary role in providing care and reducing disparities in low socioeconomic status (SES) and uninsured patients [18]. Given that Hispanics represent the highest percentage of uninsured minorities in the United States [19], it is likely that FQCHs serve a significant proportion of Hispanics. The rapid growth of Hispanics in the United States merits attention to facilitate health care providers' cultural understanding and readiness to meet the pain management needs of this population.

As of 2014, Hispanics constitute 17% of the total population of the United States, and this is projected to increase to 28.6% in the next 40 years [20]. The heterogeneity of the Hispanic population further

complicates our understanding of the cultural beliefs needs of this community with the pain management needs in this population. These confounding factors also stem from differences between Hispanics who speak primarily English compared with those who primarily speak Spanish, as well as differences in assimilation and acculturation between US-born Hispanics and foreign-born Hispanics from various countries. These factors create additional barriers for health care providers to deliver culturally appropriate care. Most health care providers are not adequately trained to recognize the differences that might exist between subgroups of Hispanics [9,10,13,21].

In pain research, patient-centered approaches, including qualitative methods such as focus groups, have been shown to provide valuable information regarding pain disparities [8,13,22,23-25]. A limited number of studies have used qualitative methods to explore the cultural factors influencing the pain experience and pain management needs of Hispanics with limited English proficiency and differing levels of acculturation [22,26,27]. The present study will contribute to and extend this literature by obtaining the patient's perspective in their native language (Spanish) along with the administration of culturally validated psychosocial questionnaires. The use of culturally validated questionnaires such as the pain catastrophizing scale (PCS) and the positive and negative affect schedule (PANAS) provide an added opportunity to provide some quantitative descriptions pertaining to the psychosocial functioning of the patients included in this study.

### Aim of the Study

The dynamic ways in which sociocultural factors affect the health of immigrants requires acknowledging the multiple factors that operate together and are continually shaping immigrants' health for the better or worse. To apply previous knowledge and improve understanding of the relationship between sociocultural factors and an individual's migration experience on pain management disparities, the current study included perspectives from 24 foreign-born Hispanic health care patients at an FQHC. These participants possessed limited English proficiency as well as low levels of acculturation. This paper discusses the needs related to pain management of this low-SES population that faces language and cultural differences. As they seek care at FQHCs, they are required to learn, assimilate, and navigate a medical system that is likely very different from their country of origin. Furthermore, as an exploratory aim, we compared participants' responses to the normative data available on the Spanish versions of the pain and mood questionnaires.

### Methods

### Participants and Recruitment

The study was approved by the Institutional Review Board (IRB) of The University of Alabama. This study



included a convenience sample from a community health center devoted to serving medically underserved patients in West Alabama. Participants were referred by medical providers or approached directly in the waiting room by a Spanish-speaking researcher. Inclusion criteria were age older than 19 years, persistent pain for over three months, and use of Spanish as their primary language. Eligible participants were invited to attend a one-time two-hour focus group. We recruited participants on an ongoing basis, and for every five to nine interested participants a focus group was scheduled. At arrival, written informed consent was obtained from all study participants and questionnaires were administered before proceeding with the interviews. Upon completion of the study, participants received \$20 for their time and effort.

### Measures

### Sociodemographic Measures

Sociodemographic variables included age, sex, years of education, household income, work status, job title, country of origin, and years living in the United States. In addition to providing sociodemographic data and information related to their pain condition; participants completed the following standardized measures.

### Acculturation

The Spanish-validated version of the brief acculturation scale was used to capture acculturation levels based on language use [28]. Acculturation is described as the degree to which immigrants adapt their attitudes and behaviors as they are exposed to a new group, nation, or culture [28]. Participants were asked to indicate their preference of spoken language, as well as language preference for communicating with family, friends, and language typically used for thinking. Participants indicated their preferences with a Likert-type scale with end points ranging from 0 = "only Spanish" to 4 = "only English" and anywhere in between. The brief acculturation scale for Hispanics has been shown to have high reliability ( $\alpha = 0.92$ ) and validity among different subgroups of Hispanics [28,29], suggesting that this brief four-item measure is an accurate instrument to measure acculturation. In our sample, The brief acculturation scale for Hispanics was also found to be a reliable measure with good internal consistency ( $\alpha = 0.86$ ).

The Spanish-validated version of the psychological acculturation scale (PAS) was used to examine psychological aspects of acculturation, such as feelings of belonging and emotional attachment to the Anglo-American and Latino/Hispanic culture [29]. The PAS is a 10-item self-report measure that captures cultural orientation on a nine-point Likert-type scale with end points ranging from 1 = "only Hispanic/Latino" to 9 = "only Anglo/American" and anywhere in between. The midpoint indicates bicultural orientation, suggesting equal

acculturation to both cultures. Regarding reliability, the alpha coefficient of our sample ( $\alpha=0.90$ ) was found to be comparable and similar to the alpha coefficients reported for the Spanish sample ( $\alpha=0.83$ ) and English ( $\alpha=0.85$ ) versions of the PAS [29,30].

### Pain Catastrophizing Scale

The Spanish-validated version of the PCS was included to measure pain catastrophizing based on three domains, magnification, rumination, and helplessness [31]. Pain catastrophizing is described as the tendency to exaggerate and negatively evaluate one's ability to deal with pain [32]. There is robust evidence that pain catastrophizing is associated with negative pain outcomes, higher levels of disability, increased pain medication usage, and increased avoidance and fear of pain [32]. The PCS is a widely used 13-item self-report measure that captures participants' responses to statements about thoughts and emotions experienced when in pain. Participants used a five-point Likert-type scale that ranges from 0 = "not at all" to 4 = "all the time" to indicate the degree to which they have certain thoughts and feelings when they experience pain. The Spanish version of the PCS has adequate internal consistency  $(\alpha = 0.79)$ , high test-retest reliability over a six-week period (r = 0.84), and similar psychometric properties to those found in the original English scale [31,32]. The Spanish version of the PCS was validated with Hispanics from Spain [31], and while this version has been used with Spanish-speaking patients, to our knowledge this is the first time the Spanish version of the PCS has been examined in the United States. In the current sample, the Spanish version of the PCS had good internal reliability ( $\alpha = 0.88$ ).

### Positive and Negative Affect Schedule

The Spanish-validated version of the positive and negative affect schedule was used to measure mood states concerning of positive affect (PA) and negative affect (NA) [33]. The PANAS is a self-report measure that captures participants' affect based on a 10-item list for positive affect (active, alert, attention, determined, enthusiastic, excited, inspired, interested, proud, and strong) and a 10-item list for negative affect (afraid, ashamed, distressed, quilty, hostile, irritable, jittery, nervous, scared, and upset). Participants were asked to indicate how they were feeling "at the present moment," and they used a five-point Likert-type scale with end points ranging from 1 = "none at all" to 5 = "extremely." The Spanish-validated version of the PANAS has been shown to have strong internal consistency for PA ( $\alpha =$ 0.85) and NA ( $\alpha = 0.81$ ) [34]. To our knowledge, the Spanish version of the PANAS has yet to be used with patients with chronic pain. Adequate internal consistency for PA ( $\alpha = 0.74$ ) and NA ( $\alpha = 0.74$ ) were found in the current sample.

### Visual Analogue Scale for Pain

The visual analog scale (VAS) for pain intensity was used to assess patients' current level of pain. The VAS was taken from the Spanish version of the memorial pain assessment card (MPAC) [34]. Participants were asked to indicate their current level of pain intensity using a VAS with end points ranging from "least possible pain" to "worst possible pain." The MPAC is widely used in the United States to capture a multidimensional overview of the current state of patients with cancer pain who are in treatment [34,35]. The original MPAC includes rating scales for pain intensity, pain relief, and mood, which have been found to have an adequate internal consistency ( $\alpha=0.74$ ) [34]. However, for this study, only the pain intensity VAS was administered to assess patients' current level of pain.

### Study Design

This study used a qualitative design with quantitative measures to describe the sample. At arrival, participants completed the demographic questionnaires, the PCS, PANAS, and MPAC, followed by an interview. The interview guide consisted of open-ended questions about the participants' pain experience, interference, coping mechanisms, past and current treatment experiences, attitudes toward medications, and willingness to try other pain treatments. All interviews were done at the health center, moderated by the primary author, and audio-recorded for transcription purposes.

### **Data Analysis**

### Qualitative Data Analysis

Audio recordings were transcribed verbatim by a transcriptionist and translated into English by two members of the research team. Translations were checked by a bilingual researcher, who also conducted a backtranslation of the English version into Spanish to check for accuracy and cultural interpretation of the text. English transcripts were imported into the qualitative data management software Atlas-ti version 6.2. An inductive thematic analysis was conducted following the guidelines described by Braun and Clark (2006), a qualitative approach widely used in the field of psychology [36]. These guidelines have been used in previous qualitative pain studies to examine physicians, medical trainees, and patients' perspectives about chronic pain [37,38]. Coding and memo writing strategies were used to analyze and understand the relationships observed throughout the process of data collection. This procedure allowed us to check, refine understanding, and improve our interpretation at all phases of data collection and data analysis.

After the first focus group interview, three members of the research team read the transcript multiple times to identify overall impressions and develop a coding scheme. The researchers met to discuss similarities and discrepancies until a final coding scheme and overall theme impressions were agreed upon. The same coding scheme was subsequently applied to the remaining transcripts. Using the coding scheme, the first author searched for patterns and variations among all interviews and compared across interviews until new codes or themes were no longer generated. Saturation was determined after constant comparison across interviews were made, and central components of the themes were observed across all participants.

### Quantitative Data Analysis

All quantitative analyses were conducted using the Statistical Package for Social Sciences, SPSS version 21. Descriptive statistics were used to describe the sociodemographic, acculturation factors, pain history, psychological functioning, and other characteristics of our sample. As part of an exploratory analysis in our study, a single sample *t* test was conducted to compare mean scores of our sample compared with the norms (i.e., means collected from Spanish-speaking patients who participated in the original studies). These comparisons were made for the VAS pain intensity of the MPAC, PCS, and PANAS.

### Results

### Descriptive Statistics

Seventy-five patients expressed interest in the study, and 24 completed the study. Primary reasons given declining actual participation were work-related conflicts, lack of transportation, and childcare responsibilities. In total, there were six focus groups and one individual interview conducted. An individual interview was conducted to respect the participant's time on one occasion when no other participant attended the scheduled focus group. Six participants attended the first focus group, followed by two participants in focus group #2, two participants in focus group #3, eight participants in focus group #4, two participants in focus group #5, and three participants in focus group #7. Thus, on average, the size of the focus groups (not including the single interview) was 3.8 participants, with a range of two to eight attendees per focus group. Please see Table 1 for a summary of the demographics and pain characteristics of our sample. A total of 17 (70.8%) females and seven (29.2%) males participated in the study. The mean age of our participants was 41.9 years (SD = 8.6 years), with a range of 27 to 55 years. All the participants were Hispanic, but half of the participants selected white (50.0%) and the other half selected "other" (50.0%) to describe their race. Most of our participants were married (88.0%), noninsured (83.0%), educated below high school (77.0%), worked full-time or part-time (54.0%) in housekeeping (58.0%), and reported an annual household income below \$15,510 (71.0%).



**Table 1** Summary of patients' characteristics

Characteristic	Total sample	Frequency, %
Sex		
Female	17	70.8
Male	7	29.2
Race		
White	12	50.0
Other	12	50.0
Occupation/industry		
Full-time	9	37.5
Homemaker	6	25.0
Housekeeping	5	20.8
Construction	4	16.7
Restaurant		
Country of origin		
Mexico	19	79.2
Honduras	3	12.5
Puerto Rico*	2	8.3
Pain location (primary)		
Low back	6	25.0
Head	4	16.7
Knee	4	16.7
Shoulder	3	12.5
Pelvic	3	12.5
Feet	2	8.3
Hands	2	8.3
Source of pain		
Unknown	14	58.3
Arthritis	5	20.8
Accident	4	16.7
Migraine	1	4.2

<sup>\*</sup>US territory.

### Acculturation

All the participants were born outside of the United States (two reported being born in the US territory of Puerto Rico). Among the 24 participants, 19 (80%) were born in Mexico, three in Honduras (12%), and two in Puerto Rico (2%). The mean number of years lived in the United States was 13.5 years (SD = 5.2 years), with the range being six to 28 years. Regarding acculturation level, our sample is characterized as "less acculturated" as measured by the brief acculturation scale (scores below 2.99) and the PAS (scores below 4.99) [27,29]. All the participants preferred and used Spanish to communicate with others. In terms of acculturation attitudes and sense of attachment to the Anglo-American or Latino/Hispanic culture, most participants preferred and identified with the Latino/ Hispanic culture, with the exception of two participants, who preferred the Latino/Hispanic and Anglo/ American culture equally and therefore were considered "bicultural," as suggested by the PAS [29].

### Pain Typology

The most frequent location of pain was low back (25%), followed by head (16.7%) and knee (16.7%) pain. More than half of the participants reported the cause of their pain as unknown (58.3%). Under the unknown category, some participants also listed poor nutrition, stress, weak cartilage, and heat as the potential sources of their pain. Participants reported moderate levels of pain intensity (M=4.8, SD=3.1), and mean duration of pain was 4.5 years (SD=5.3).

### Qualitative Findings

The results revealed the significant and multifaceted impact of traditional Hispanic cultural values on patients' perspectives and expectations surrounding pain and treatment.

### Theme 1: Reasons for Enduring the Pain

### Family Obligations

Numerous statements across interviews indicated that participants were likely to push themselves and continue doing their usual work both at home and outside despite the pain. Many participants shared that their desire to provide for their families motivated them to endure the pain and continue working. Across all the interviews, participants prioritized their roles as mothers, fathers, wives, and husbands, which meant that they often ignored their pain to meet the needs of their families. The majority of the participants had jobs that required physical labor (e.g., housekeeping), and many acknowledged that self-talk and reminders that the pain would be over soon were widely used to continue with their activities. The following quotes help illustrate the prioritization of family needs over individual needs.

The pain is always there, and one just tries to focuses about it because one has a lot of things to do. One has to work, clean, cook, and if one centers on the pain then one cannot get anything done.

And you know the pain is there, but you have to continue. Sometimes I've done some chores, but I still need to cook, but I don't stop cooking because I am in pain because I just have to keep going, there is no other option you have to keep moving.

The participants described their family relationships as cohesive and expected family members to care for each other. Relying on family members for assistance with chores and child rearing was mentioned across all the interviews. Assistance and support from extended family members were also common and accepted. For the most part, participants appreciated the help and were glad that their families cared about their condition and limitations. Despite this help, some participants expressed dislike and sadness about not being able to do things on their own (which relates to the first theme) and

### Pain Management in Foreign-Born Spanish-Speaking Hispanics

feeling like a failure to their families. This was especially bothersome for stay-at-home mothers who felt useless for not being able to do chores. The following quotes highlight the emotional commotion experienced when others help with house-related activities.

I can do the cooking and cleaning, but they don't let me do them. They are already doing my chores and they are taking away my job at home.

My husband helps me and tells me to lie down, rest and don't work, but I get stressed. I stress a lot when I am not doing much. When I have nothing to do, I feel more bad. I need to maintain busy so I can forget about the pain.

I have my kids who are dependent on me and my husband too, and if tomorrow I can't serve them I am scared he thinks that I am not good for anything.

In concerning of pain behaviors, some of our participants reported refraining from overt pain behaviors to prevent family, especially young children, from worrying. At work, many participants were hesitant about showing pain and being labeled complainers. Many indicated acting as if the pain was not there and continuing with their work activities. As seen in the quote below, the fear of being fired or losing workdays prevented them from expressing or talking about their pain at work.

With my arm half moving I am not cleaning well, imagine if I don't move my arm at all I will get fired. I just have to keep working because at work they might think that I am going to sue them.

### Theme 2: Pain Treatment Attitudes

### Beliefs About Medication

Across all interviews, the participants expressed negative attitudes and beliefs about medication, but with some ambivalence. The primary reason for rejecting medication was a fear of becoming an addict. Some participants also indicated a fear of side effects while questioning the effectiveness of the medication. For example, one participant asked others if they knew of a medication that worked and did not have any side effects. Most of the participants noted that medication was never their first choice and it was only used when the pain became unbearable. It is interesting to note that those who acknowledged using pain medication more frequently than others also reported feeling weak for relying on medication to relieve the pain. On the other hand, a few participants expressed neutral or even positive attitudes toward medication and pain relief. The following quotes illustrate the attitudes toward medication for pain management.

I don't want to take anything for the pain; I tried to get rid of the pain without taking anything. I don't want to be dependent on medicine.

I take medication only for pain when I need it, or for conditions or when actually the body says 'You are passing the limit that you can tolerate' that's when I take medication for the pain.

### Self-Management Strategies

The participants preferred natural alternatives and noninvasive medical treatments, such as over-the-counter (OTC) pain relief creams, electric blankets, yoga, and going to the chiropractor. They also reported using folk remedies, such as homemade ointments, teas, or consulting with a natural healer. A few participants reported relying on homemade remedies and self-distraction techniques because they did not know what else to do for the pain and believed that the pain would go away on its own. During the interviews, it was common for the participants to discuss homemade remedies and share suggestions on what else to try as an alternative to medication. Some mentioned social activities with family as fun distractions from the pain, such as dancing and playing with kids in the park. The following quote is from a participant who uses medication and distraction to cope with the pain.

Well, apart from the medicine that we already know, pills and all that, what has worked for me is to distract myself. The pain does not stop, but at least I make something that I like to forget a little of what hurts, the head and such, and suddenly I am surprised because I do not hurt anymore, I am ready, let's go. So it is something that is not medicine, but it helps.

### Knowledge About Pain Treatments

Limited knowledge about other treatment options was also common. Moreover, none of the participants had been offered surgery, physical therapy, or psychosocial treatments for pain management. Across all the interviews, participants voiced their desire to learn more about different types of pain management treatments. When asked about previous attendance or possible interest in a pain management group (defined as a chronic pain psychoeducation group that would also impart coping skills to help self-manage chronic pain), participants reported not knowing much about them but expressed openness to joining a group. Some liked the idea that it was an alternative to medication, "Anything is better than medicine." The following quotes illustrate participants' willingness to try psychosocial treatments for chronic pain even if there is a cost involved.

I will experiment and see, and if it is expensive I will see and get my budget and if I can do a payment plan or any opportunities they offer and see the options. I mean I will pay; even if is 10 dollars I will pay. I would do and try anything as long as I see that it is working.

Like she said, if there are possibilities to pay and do payment plans and work out a budget I will. And if it benefits me and my health I would do it.



### Theme 3: Experiences with Medical Providers for Pain Management

Language and Cultural Differences

Participants listed difficulties pertaining to listed problems; especially noted were difficulties describing their pain and asking follow-up questions. Due to the language barrier, some participants felt that providers were either not taking their pain seriously or not making efforts to understand the patients' limited English. Many participants also noted that while having a translator available helped them communicate with providers, the opportunity for a personal connection with their provider was lost. As a whole, participants expressed concerns about the how much time providers spend with their patients and how little providers try to get to know their patients.

In terms of culture and country of origin, patients indicated that providers often assume that all Hispanics are the same, and fail to ask where they are from: "We are all not the same." Even if people are from the same country, participants highlighted the importance of acknowledging regional differences as there might be variations in dialects, customs, and ways of treating pain. As a whole, the participants would like their providers to listen to them and ask more personal questions.

Medical encounters with health care providers were described as quick and impersonal. Although across all interviews participants commented on how things were different in the United States compared with their home countries, one participant described her experiences as "here is all business and they don't care about you." Some of the differences in medical encounters included the amount of time providers spent with patients, friend-liness, and efforts made to establish and maintain a relationship with patients. The following quotes illustrate patients' understanding and expectations during medical encounters.

So I feel that sometimes the doctors do not take you seriously or they are in a hurry. They are in a hurry because they see and treat you for two or three minutes and they leave. I stayed sincerely disillusioned and mad, because it is the specialist, for the love of God.

I know that I cannot change the medical system here, but I would like more attention, because in our countries the doctor stays for up to an hour with you if possible, here he comes and goes and ends, sometimes you are there two minutes and then he leaves.

Like I said, I am not going to change all of the methods of the system here, but I would like attention.

### Expectations for Pain Treatment

Satisfaction with medical visits was highly influenced by patients' expectations about pain relief. Patients admitted to only seeking medical attention after a number of failed attempts with self-management practices. They

also described that going to the doctor was the "last resort for pain relief." Participants voiced their concerns about not being offered medication as a treatment option. Although medication was not preferred, participants indicated a willingness to use medication as a last resort for the pain and wanted to have access if needed. As a result, some participants reported seeking care elsewhere, like consulting with doctors from their country of birth or borrowing medication from others. Participants also shared feeling as if they were not offered medication because providers assumed that they could not afford it. Despite their low income, some participants indicated that they would have followed up with medication treatment and found ways to cover it if their provider had offered it. These quotes show participants' disappointment for not getting what they felt was optimal pain treatment:

When one already decides to go to the doctor it is because you need treatment because you want them to see you. It costs you much work to make the decision to go because you know that you are going to lose time, that you are going, to spend money, and when you are already there you want them to treat you.

Many times they think that one is not going to pay, they do not give you sufficient medicine or attend you well.

### **Quantitative Findings**

When comparing the PCS scores from our sample to the validation sample of fibromvalgia patients from Spain, we found that the scores in our sample (lowacculturated foreign-born Hispanic) were comparable with published norms [31]. Ratings on the VAS scale for pain intensity taken from the MPAC were significantly different from the original validation study with Hispanic cancer patients. Not surprisingly, the sample mean of our sample was significantly lower than scores reported in the validation study of the MPAC [34], which was primarily designed to assess the pain experience of patients with cancer receiving outpatient care. Our sample also scored lower than the published norms for the Spanish version of the PANAS. To our knowledge, this is the first time a Spanish version of the PANAS was administered to foreign-born Hispanics with chronic pain. In part, the lower scores found in our sample help illustrate the mood interference that is often reported by patients with chronic pain [39].

### **Discussion**

To the best of the authors' knowledge, this is the first study to examine the pain management needs and perceived barriers to medical pain care of foreign-born Hispanic patients with limited English proficiency and low acculturation seeking medical care at a federally qualified health center. These findings illustrate the cultural factors, medical knowledge and beliefs, and

perceived discrimination influencing the pain experience of this group of Hispanics, a population cohort that may be underrepresented in research due to the language limitations and limited availability of bilingual/bicultural researchers. While some researchers have made efforts to include Spanish-speaking Hispanics in research studies, most of these studies are done in English and include English-speaking US-born Hispanics as well as foreign-born Hispanics [9,13,16]. By bringing together Spanish-speaking patients with shared common experiences (e.g., foreign-born) and cultural characteristics, we provided a comfortable environment for patients to voice their needs and factors influencing their medical decision-making about chronic pain as they adapt to and assimilate with US culture.

This paper provides a look at how Spanish-speaking Hispanics manage their pain and what they expect from their health care providers at the time of their visit. This is particularly necessary when serving patients who immigrate and might not have had contact with the US health care system or Western medicine. While our findings reiterate the language and cultural barriers faced by immigrants in other countries [40-42], they also help illustrate the cumulative effect of these factors on patients' health literacy as a pathway to disparities in care. By including patients' perspectives, we were able to further understand the complexities and often poorly understood factors affecting the quality of care of patients with limited English proficiency. As seen, lack of understanding of mainstream practices and acknowledgment of differences in health care systems contributed to dissatisfaction with medical care.

Overall, our findings illustrate the multiple influences of family values on various aspects of the pain experience. Similar to what has been previously found, family needs were prioritized over individuals' needs and drove patients to continue serving others despite the burden of pain [9,16]. Patients in our sample turned to selfdistraction strategies and physical activities (e.g., household chores) to continue enduring the pain and fulfill family roles (Theme 1). When participants received assistance from family members for daily activities and house-related tasks, they frequently reported dismay, especially when this help came from children (Theme 1). This disappointment may be due to the belief that receiving help from family is in some way interfering with the family structure and parental responsibility toward children. Not surprisingly, Im and colleagues (2007) noted traditional gender roles and women's perceived obligation to their families as possible explanations leading to inadequate pain management among Hispanic women with cancer [8]. The prioritization of family needs over individual needs may prevent Hispanic patients from seeking timely care, which may result in illness exacerbations and potential reliance on emergency care.

The decision to go to the doctor for pain was highly influenced by patients' inability to cope with the pain on their own. As captured by Theme 1, seeking medical

care required significant considerations. It meant patients had to take off work and resulted in feared repercussions for not being able to perform their jobs properly. Importantly, given that a large proportion of our patients were primarily in blue collar positions, it is likely that the strenuous physical activity and heavy lifting places them at an increased risk of physical injury and chronic pain. One interpretation of our findings is that the prioritization of family needs over individual needs may be a barrier for timely care as patients struggle with temporarily relinquishing their family roles to care for themselves. In congruence with a collectivist culture, it is not surprising to see the focus on family needs over personal needs.

The ability to seek care without health insurance at FQHCs allowed participants to address health needs at an affordable cost. Despite the access to medical care, patients continued to face barriers to adequate care. Given the nature of these medical settings that primarily serve low-SES and uninsured individuals, participants in our study felt stereotyped about their ability to afford medical care (Theme 3). In part, this perceived stigma might play a role in the negative impression patients have of medical providers and their satisfaction with care when they make the decision to seek medical care. Similar to other countries with a large immigrant population, disparities in health care utilization and quality of care remain problematic even when accessibility and insurance barriers are removed [40].

Consistent with previous findings, including other subgroups of Hispanics, our participants voiced reluctance about using medication for pain management [9,16]. Interestingly, some participants expressed wanting to have a choice to access pain medications as a last resort for pain relief. However, it was common for participants to not receive prescriptions at the time of their medical visit, which was thought to be the result of providers assuming that the patients could not afford it (Theme 3). This finding brings attention to the influence that misconceptions about Hispanics' view on medication could have on treatment recommendations.

It is also important to note that the variation in responses to medication as a treatment option highlight the importance of acknowledging how patient preferences for medication might vary due to acculturation and level of adaptation to the mainstream health care organization—again, another illustration of the trajectory model of health and how immigrants' health behaviors change over time [15]. The influences of acculturation level on health care practices have revealed interesting findings among Hispanics and other immigrant groups. Among Turkish and Moroccan first-generation immigrants in the Netherlands, for example, visits to the general practitioner did not differ across acculturation level [42]. However, this changed with specialized care, with higher levels of acculturation associated with increased use of specialized care among Turkish immigrants only [42].

Inequalities in health care between the mainstream culture and immigrant populations is likely to also be influenced by patients' satisfaction with medical care and how it compares to their country of origin. Our participants' perspectives point to how prior experiences with non-Western medical systems shape current expectations for medical care and satisfaction with the quality of care. It is particularly important for foreign-born Hispanics who have language limitations and different cultural views on medical care to experience a positive medical encounter as it might be a significant factor in how they approach their health care needs in the United States. As a result, it might be helpful for health care providers to acknowledge that in part these cultural expectations might be shaped by patients' previous experiences with medical doctors in their home countries.

Also, limited understanding about how medical care might differ in the United States and at FQHCs compared with their home countries could also influence how these patients proceed about their health care needs. It is also important to consider how the preference for a more personal provider-patient relationship fits within the Hispanic culture as a whole. In some ways, the personal distance felt by many patients reflects the cultural value of "personalismo," the preference for warm and friendly relationships [43]. Interestingly, a close relationship with providers mirrors the core concepts described in the patient-centered care model, which have been associated with improvements in patient satisfaction and health [44]. Consequently, we believe that patient populations like these may gain additional benefits from patient-centered care.

Self-management strategies mentioned across focus groups were reflective of what has been previously found with Hispanic patients, such as folk remedies, including herbs and other home remedies [10,11,13,16]. Cambell and colleagues (2010) suggested that Latinos' preference for folk remedies may be due to the financial costs associated with medical visits and lack of insurance [10]. However, the present study suggests that our participants preferred folk remedies because they are noninvasive, natural, and convenient. Preference for folk remedies is also common in Asian culture, another growing minority in the United States [20]. A study done with Chinese and Vietnamese immigrants found that patients would like their providers to inquire more about their nontraditional practices while also considering Western medicine options [45]. Across all of the interviews, participants in our study voiced their willingness to consider various treatment options, including nonpharmacological treatments, such as psychosocial interventions, even if they had to arrange a payment plan (Theme 2).

This suggests that despite financial difficulties commonly faced by low-income patients, willingness exists to budget and pay for treatments that they trust and understand. For low-acculturated and foreign-born

Hispanics, at-home-remedies and self-management practices might be preferred as a function of patients being unfamiliar with other pain treatment options available. The limited understanding of available treatment options due to language barriers and missed opportunities to engage with providers is a unique obstacle faced by patients with limited English proficiency, such as those included in our study.

Despite some of our patients noting that the presence of a translator in the room took away the opportunity to feel connected and personal with their health care providers, bringing in an interpreter to the team can be an asset and help communicate treatment recommendations that are less medically invasive, as requested in our sample. Our findings also highlight the need to increase patients' understanding of pain medicine and other treatment modalities for chronic pain to help them make more informed choices about their health care. This suggestion is not necessarily intended to increase health care utilization or pain medication intake for Hispanics; instead, we recommend making information more available to improve patients' familiarity, understanding, and comfort with pain management practices available in the United States.

In addition to qualitative findings, exploratory analyses on the quantitative portion of the study provided a look at the psychosocial functioning of our patients. The PCS, PANAS, and VAS-MPAC for pain were administered before to the interview and compared with the published norms. These measures have been validated in Spanish, but to our knowledge these questionnaires have not been administered to Hispanics living in the United States with low acculturation and chronic pain. The PCS was validated in Spain with fibromyalgia patients, the PANAS was also validated in Spain with healthy individuals, and the VAS-MPAC was validated with Hispanics with cancer pain living in the United States [31,33,34].

For the purpose of our study and to help describe our sample, we found that compared with the published norms, our participants' scores were comparable with the PCS but different from the PANAS and pain intensity VAS of the MPAC. As expected, our participants' scores on the pain intensity scale of the MPAC were different that those reported by the normative sample of cancer patients [34]. Given that the MPAC was designed as an assessment instrument for cancer pain, we were not surprised to find that the pain intensity ratings of our sample are much lower than those reported in the validation study.

### Limitations

These are perspectives of "low-acculturated" patients and should be interpreted with caution as these themes may not reflect the pain experience of "highly



acculturated" Hispanics, who might be more familiar with the US health care system and able to communicate in English with their providers. Given the nature of qualitative inquiry, the transferability of the findings is limited due to the depth of information and understanding obtained from this particular sample [46]. While saturation was obtained through the coding of focus groups, it is possible that different formats (e.g., individual interviews) could reveal additional themes and provide more details about the cultural factors influencing pain management of foreign-born Hispanics. Finally, the results on the standardized Spanish version of the PCS, PANAS, and the pain intensity VAS from the MPAC should only be considered descriptive and serve as additional evidence for the use of objective measures to assess the pain experience of Spanish-speaking patients.

**Conclusion and Future Directions** 

This study captured the pain experience of foreign-born Spanish-speaking Hispanics with low acculturation while also expanding our understanding of the perceived barriers to pain management faced by this population as they navigate the US medical system and seek care at FQHCs. It is especially evident that patients who immigrate to a new country face many of roadblocks as they learn, adapt, and assimilate to a new health care setting and health policies that may differ from their country of origin.

While barriers to optimal health care are common for individuals with limited language proficiency living in another country [40-42], our study highlights particular barriers to pain management that might be unique to collectivist cultures like the Hispanic culture that prioritize family needs over individual needs and view pain management at a medical center as a last resort for care. In most cases, participants opted for natural treatments and noninvasive practices, reflecting the cultural values and preference for self-management over other types of treatment options. However, a suggestive interpretation of patient preference for self-care practices and folk remedies is that it may be partially due to the patients' unfamiliarity with available treatment options, including effectiveness, cost, and parallelism with treatment options employed in their home country. The implications of our findings inform potential factors that might play a role in pain disparities among this minority group. For instance, while FQHCs remove access barriers for low-SES Hispanics, disparities may persist due to patients' acculturation levels. Potential difficulties may result as patients navigate a health care system that may differ from their country of origin. Furthermore, patients' perception of perceived stigma about financial ability to afford care might also be a significant barrier unique to patients that seek care at FQHCs.

These findings help illustrate the sociocultural contextual factors that are potential targets for action to reduce pain disparities. Future studies should examine the

influence of acculturation levels on patients' preference for pain management practices and satisfaction with treatments. Efforts are also needed to evaluate the impact that culturally appropriate and easy-to-understand education regarding pain (in Spanish and English) may have on patients' ability to learn about and consider mainstream practices (such as physical therapy, pain medication, surgery) for pain management. The use of psychosocial and mood measures could help identify patients with mood problems who could benefit from various treatments. Therefore, more efforts are needed to increase the administration of validated questionnaires and the examination of the clinical utility of these tools in the pain assessment and treatment of low-acculturated Hispanics.

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