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Hispanic Older Adults' Osteoarthritis Pain Communication

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Abstract

Better understanding of how Hispanic older adults describe their chronic pain might suggest ways to support Hispanic older adults to talk about important pain information with their practitioner. The study aim was to describe how Hispanic older adults communicate pain information, including the amount of pain information and communication processes employed. A secondary analysis with a descriptive design was used. The data was from a larger primary study that tested the effect of practitioner pain question phrasing on the amount of pain information described by older adults with osteoarthritis pain. The sample for the current secondary analysis was comprised of the 24 Hispanic older adults with chronic osteoarthritis pain. In the primary study older adults watched and orally responded to a videotape of a practitioner asking about their pain. Pain content from the patient responses was content analyzed by two independent raters. In the current secondary analysis study communication processes were also content analyzed by two independent raters using a priori criteria from Communication Accommodation Theory (clarity, syntax, complexity, explicitness, and staying on topic). Participants described $M = 5.5$ ($SD = 3.39$) items of pain information. The majority stayed on topic, half spoke clearly and explicitly. Hispanic older adults with osteoarthritis pain concisely describe clinically important pain information when given the opportunity to do so.

Keywords

Hispanic; pain; osteoarthritis; older adult; communication

Hispanic older adults are part of the fastest growing minority group in the United States (U.S. Census Bureau, 2008) yet little is known about communicating with Hispanic older adults about their chronic pain. Much of the available information on pain under represents Hispanics. For example, Hispanics comprised only 7% of the sample in a study that focused on comparing pain in Hispanic and non-Hispanic older adults (Reyes-Gibby, Aday, Todd, Cleland, & Anderson, 2007). Lack of Hispanic representation in the research may be due in part to lack of recruitment effort, lack of incentive to participate, or barriers to participate such as language. Research specifically addressing chronic pain in Hispanic older adults could help guide pain management with Hispanic older adults. The purpose of the current study was to describe the type of pain information communicated by Hispanic older adults

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with osteoarthritis pain, the amount of communicated pain information, and the processes Hispanic older adults employ to communicate their pain information.

Pain research with Hispanic adults provides some insight into ethnic differences in pain response that might be relevant for Hispanic older adults. Hispanic and non-Hispanic patients report difficulty communicating with health care practitioners about their cancer pain. Language barriers were identified as uniquely problematic for most of the non-English speakers (Im et al., 2009). The obligation of carrying on the family life as it is culturally expected of Hispanic women may contribute to female Hispanic older adults' insufficient pain management. Family is a central part of Hispanic lifestyle and often holds precedence over personal issues such as pain. Pain is also viewed by some as God's punishment for past behaviors (Im, Guevera, & Chee, 2007). Mexican-American men might exhibit the characteristic of machismo, valuing stoicism and quiet pain tolerance (Im et al., 2007; Villarruel, 1995). Culture specific barriers to pain management may exist for some Hispanic adults, making adequate pain communication and management even more difficult to achieve.

Additional barriers such as reduced financial resources might exacerbate pain management for Hispanic individuals (Reyes-Gibby et al., 2007). Hispanic and non-Hispanic Blacks reported more severe pain than White non-Hispanics perhaps as a result of concomitant lower socioeconomic status (Reyes-Gibby et al.). Hispanics are 14% less likely to seek the aid of a primary care physician than White or Black Americans. Those least likely to seek out care by a primary care physician were younger, Spanish speaking, low income males with less education (Nguyen, Ugarte, Fuller, Haas, & Portenoy, 2005).

Pain in underrepresented groups such as Hispanics is treated with fewer analgesics than for non-Hispanic Whites (McDonald, 1994). Hispanic patients treated in the emergency department for long bone fractures were more than twice as likely, than non-Hispanic patients to receive no analgesics (Todd, Samaroo, & Hoffman, 1993), despite reports of similar levels of pain (Todd, Lee, & Hoffman, 1994). Hispanic patients self administered similar levels of analgesia via patient-controlled-analgesia as White and Black patients, yet were prescribed significantly less analgesics (Ng, Dimsdale, Rollnik, & Shapiro, 1996). A total of 65% of Hispanic patients with chronic cancer pain did not receive adequate analgesia according to recommended guidelines, as compared with 50% of non-minority patients. Hispanic patients also reported less relief (Cleeland, Gonin, Baez, Loehrer, & Pandya, 1997). This treatment discrepancy is not well understood and requires more research to illuminate the causative factor. Greater understanding of how Hispanic older adults communicate about their pain would provide insight into ways to improve their pain communication and pain management.

Communication Accommodation Theory provided the theoretical framework for the current study. Communication Accommodation Theory describes the motivations and behaviors of people as they adjust their communication in response to their own needs and the perceived behavior of the person with whom they are speaking (Fox & Giles, 1993; Giles, 1973). Strategies for adjusting one's own communication include use of approximation, interpretability, discourse management, and interpersonal control strategies (Coupland, Coupland, Giles, & Henwood, 1988). Approximation strategies involve evaluating the other person's speech rate. Interpretability strategies involve use of terminology that clearly and explicitly relates important information to the practitioner, such as use of the 0 to 10 pain intensity scale. Discourse management involves selecting the topic, contributing to the discussion by taking your turn, and maintaining topic focus. Interpersonal control involves recognizing one's own responsibility to communicate, and also includes strategies such as interruption to gain control during discussions. Hispanic older adults' effective use of these

communication strategies might enhance pain management discussions with their health care practitioners.

The following research questions were addressed. What types of pain information do Hispanic older adults communicate about their osteoarthritis pain? How much pain information do Hispanic older adults communicate? What communication strategies do Hispanic older adults employ to communicate their pain information?

Methodology

Design

The study was a secondary analysis with a descriptive design. The data were from a larger primary study (McDonald, Shea, Rose, & Fedo, 2009) that tested the effect of practitioner pain question phrasing on the amount of pain information described by older adults with osteoarthritis pain.

Sample

The secondary analysis sample comprised 24 community dwelling Hispanic older adults with chronic osteoarthritis pain, all eligible Hispanic participants from the larger primary study of 312 older adults. Eligible participants were required to self report having osteoarthritis pain; report being Hispanic/Latino, at least 60 years of age; and speak, read, and understand English. People with cancer pain were excluded.

Procedure

The primary and the current secondary analysis study were approved for human subjects' protection by the University Institutional Review Board. In the primary study older adult participants living in low income congregate elderly housing were recruited by fliers and/or direct contact, and randomized via computer to one of three pain question phrasing experimental conditions. Older adults orally responded to a videotape of a practitioner asking one of the following three initial questions, corresponding to the three conditions:

“Tell me about your pain, aches, soreness, or discomfort.”

“What would you rate your pain aches soreness or discomfort on a scale of 0–10 (0 being no pain and 10 being the worst pain possible)?”

“How are you feeling?”

The second video clip asked the participant “What else can you tell me?” This remained consistent among all participants. The third video clip questioned “What else can you tell me about your pain, aches, soreness, or discomfort?” which also remained the same for all participants. Older adults' responses were audio recorded, transcribed verbatim, and content analyzed by two trained independent raters. Older adults also responded to the Brief Pain Inventory Short Form (BPI-SF). The primary study took place in private areas (e.g. library) within the housing sites.

Content Analysis

Krippendorff's (2004) method of content analysis was used for the current secondary analysis study. Content analysis was triangulated using two different frameworks. Communication strategies derived from Communication Accommodation Theory were used to identify the communication strategies used by the older adults. Types and amounts of important pain information were identified using the practice guideline from the American Pain Society (2002) *Guidelines for the Management of Pain in Osteoarthritis, Rheumatoid arthritis, and Juvenile Chronic Arthritis*.

For the communication strategies, responses were coded according to speech rate (time to the nearest second that the participant took to respond to the final open-ended pain question), clarity (use of specific versus general words (e.g. right knee versus leg)), use of medical terminology (use of any prevalent medical terminology), explicitness (communication in a way that produced a vivid mental image (e.g. burning, stabbing)), and topic cohesion (staying on the pain topic). For the amount and type of pain content the 16 a priori criteria derived from the American Pain Society (2002) *Guidelines for the Management of Pain in Osteoarthritis, Rheumatoid Arthritis, and Juvenile Chronic Arthritis* and used in previous research (Merkle & McDonald, 2009; McDonald, et al., 2009; McDonald, et al., 2008) were employed. These 16 a priori criteria included type of pain (nociceptive/neuropathic), quality of pain, source, location, intensity, duration/time course, pain affect, effect on personal lifestyle, functional status, current pain treatments, use of recommended glucosamine sulfate, effectiveness of prescribed treatments, prescription analgesic side effects, weight management to ideal body weight, exercise regimen or physical therapy and/or occupational therapy, and indications for surgery. Repeated use of the same word or phrase was counted only once within each framework.

Coding was compared by the two authors and disagreements resolved through discussion and then documented. Coded results were then entered into the SPSS and analyzed for frequencies, means, and standard deviations.

Brief Pain Inventory Short Form (BPI-SF) Pain Measure

Baseline osteoarthritis pain information was obtained with the BPI-SF. The BPI-SF consists of 15 questions that measure pain location, intensity, pain treatment, and functional interference of pain on mood and every day activities. Validity of the BPI-SF has been supported by a correlation of $r = .61$, $p < .001$ with the Short Form McGill Pain Questionnaire (SF-MPQ; Zalon). Internal consistency for the overall BPI-SF has been reported as $\alpha = .77$ to $.87$ (McDonald, Thomas, Livingston, & Severson, 2005; Zalon, 1999).

Results

The sample was composed of 24 Hispanic older adults, 7.7% of the primary study sample of 312. Most of the Hispanics were White females with less than a high school education. The ages ranged from 60 to 90 years of age. Table 1 contains demographic frequencies, and means and standard deviations of responses to the Brief Pain Inventory Short Form.

Table 2 contains frequencies for the Hispanic older adults' type of pain content in response to the initial question, which differed for each group. Table 3 contains pain content frequencies in response to the second question, "What else can you tell me?" and the third question, "What else can you tell me about your pain, aches, soreness or discomfort?" Older Hispanic adults with chronic osteoarthritis pain described $M = 5.5$ ($SD = 3.39$) items of important pain information in response to the three questions.

Table 4 contains results from the pain communication strategies content analysis. The majority of Hispanic older adults responded clearly, $n = 19$ (79.2%). More than half used specific rather than general pain descriptors $n = 13$ (54.2%), and half used explicit terminology $n = 12$ (50.0%). Few used medical terminology or syntax, and none used Hispanic specific syntax in their responses. Hispanic older adults took a mean time of $M = 15.6$ seconds ($SD = 18.0$) to respond to the final open ended question about their pain.

Transcript excerpts illustrate pain communication strategies used by the older adults. Participant #164 stated,

...”Especially in the morning when I get up from bed. I can’t straighten out my body because I’m in such pain. I’m all twisted and I can’t walk for a while, for an hour or whatever...Sometimes, like yesterday I took 3 Tylenol at once because I was in very big pain.”

The excerpt illustrates explicitness with the vivid image of morning pain and analgesic overdosing, use of medical terminology (Tylenol), and topic cohesion (staying on the pain topic). Participant # 50 stated,

“I stay almost all day in bed...I very hardly to go out because I can’t walk too much.”

The excerpt illustrates explicitness with the vivid image of pain restricting the person to bed most of the time.

Discussion and Conclusions

Hispanic older adults describe similar types and amount of pain content as the total sample of 312 older adults described in the previously reported primary study (McDonald, Shea, Rose, & Fedo, 2009). Both groups most frequently described location, intensity, and time when asked to describe their pain. A national telephone survey of 454 White non-Hispanic, 447 African American non-Hispanic, and 434 Hispanic adults found no group differences in life interference from pain (Portenoy, Ugarte, Fuller & Haas, 2004). Similarity in the experience of pain in general may transcend cultural differences. Regarding self reported arthritis pain, results from the National Health Interview Survey indicate that Hispanics and Blacks were 1.3 times more likely to report pain interference with activity, and 1.8 times more likely to report severe joint pain as non-Hispanic Whites (Bolen et al., 2010). Older adults in the current study similarly reported moderate pain intensity and functional interference from their osteoarthritis pain. Results from both studies suggest the need for more effective arthritis pain management for Hispanic older adults.

Reasons why some types of pain information were described more frequently might relate to the nature of the pain information. Pain location is more tangible than many other pain characteristics such as pain quality (Van Damme, Crombez & Lorenz, 2007), and might be easier to recall and to describe. Pain timing might draw similar attention, particularly if the timing is associated with weather changes or other easily associated factors. Pain intensity is one of the most frequently assessed pain characteristic (Krebs, Carey & Weinberger, 2007), increasing the likelihood that Hispanic older adults with chronic osteoarthritis pain might be asked about their pain intensity during medical visits. Hispanic older adults also might use increased pain intensity to determine when they need to decrease pain exacerbating physical activities, when they need to self administer an analgesic, or when they need to visit their health care practitioner for assistance in managing their pain (Gerdle, Bjork, Henriksson & Bengtsson, 2004). Pain location, intensity, and timing do not require as much prior knowledge to discuss as do surgical interventions, quality of pain, or treatment modalities. The three types of pain information provide important assessment data for practitioners.

Several important areas of osteoarthritis pain information were not communicated by the Hispanic older adults. Pain interference with daily function and lifestyle, current pain treatments and the effectiveness of the treatments, treatment side effects, and use of exercise are important areas to include during osteoarthritis pain discussions. Practitioners may need to directly inquire about this information, and take special care to respect and encourage mention of complementary pain treatments (Im et al., 2007). Hispanic older adults with osteoarthritis pain should also be taught about the types of important pain information to discuss with their practitioner.

English speaking Hispanic older adults concisely described their important pain information. The majority of the Hispanic older adults stayed on topic; were clear and brief in their responses; and used specific information to discuss their pain experience. Although language barriers continue to interfere with pain communication between Hispanic individuals and their non-Spanish speaking practitioners (Im et al., 2007), the current findings suggests that when given the opportunity to openly discuss their pain, English speaking Hispanic older adults generally relate focused, and clear pain information in a short period of time. Practitioners should allow older adults the opportunity to describe pain information in their own words by using an open-ended question to inquire about pain (McDonald, Shea, Rose, & Fedo, 2009).

The findings also suggest areas for strengthening Hispanic older adults' pain communication strategies using strategies from Communication Accommodation Theory (Coupland et al., 1988). Over 45% described their pain information using general, non-specific words. Teaching Hispanic older adults the importance of using specific rather than general words and giving examples of specific descriptions (e.g. I do not get any pain relief when I take Tylenol versus the medications do not help) might assist older adults to provide the practitioner with clearer information about the pain. Fifty percent of the older adults were not explicit when they conveyed their pain information. Teaching older adults to use words that provide a vivid mental image (e.g. the pain feels like a knife in my knee; I am unable to grocery shop anymore because of the pain) might provide practitioners with greater understanding of the pain experience and encourage a more individualized pain management approach. Only 25% of the older adults used medical terminology when discussing their pain. Older adults could be coached prior to their medical visit (Miaskowski, et al., 2004; Oliver, Kravitz, Kaplan, & Meyers, 2001) and assisted to use relevant medical terminology such as pain intensity and medication side effects during their pain management discussion.

Care must be taken to remain sensitive to cultural specific factors that might also affect pain communication for Hispanic older adults. For example, to avoid worrying family members some Hispanic patients might avoid talking about their pain (Im et al., 2007). Hispanic men might be especially reluctant to discuss their pain due to machismo, the stereotype that men should show no weakness (Im et al., 2007; Villarruel, 1995).

Hispanic older adults participating in the current study were recruited exclusively from low-income elderly housing settings, and 63% had less than a high school education. Both factors suggest a disadvantaged group of older adults. Despite these potential economic and educational barriers, the older adults communicated important information about their osteoarthritis pain. The caveat is that Hispanic individuals are less likely than non-Hispanic Whites or African Americans to visit a practitioner for their pain (Nguyen, et al., 2005), making it even more important for practitioners to expertly assess and treat pain when Hispanic older adults present with pain problems.

The absence of any culture specific terminology is difficult to interpret. Hispanic older adults might not use culture specific terms when talking with practitioners about their pain. They might reserve use of culture specific terminology for when they speak with people from their culture group. Further study of culture specific pain terminology is needed and could be addressed by studying Spanish speaking older adults as they communicate about their pain with their practitioners. Comparison of Hispanic older adults discussing their pain with Hispanic practitioners would be even more likely to reveal use of important Hispanic specific pain terminology. Nonverbal communication was not measured in the current study, but might provide helpful information related to pain communication. For example, eye contact with a family member might indicate someone other than the older adult as the major health care decision-maker (Maly, Umezawa, Ratliff, & Leake, 2006) for their pain

management. Culturally sensitive communication analysis of videotaped pain management discussions between Hispanic older adults and their practitioners might reveal helpful culture specific communication behaviors.

Study limitations are important to consider. The secondary analysis was conducted with data from a larger primary study that was not designed to address pain communication in Hispanic older adults. Older adults responded to a videotape of a practitioner, and might respond differently when speaking in person to a practitioner. Deference to people in authority, such as a health care practitioner, might occur when speaking in person with a practitioner, however. Non-English speaking Hispanic older adults were excluded from the study, and might communicate differently about pain. English speaking Hispanic older adults may be more assimilated into the dominant American culture, thus reducing culture specific differences (Maly et al., 2006). Exclusion of non-English speaking Hispanic older adults may have masked important cultural differences. Participants were not tested for their comprehension of the pain questions, and might have provided even more pain information if asked which language they preferred to communicate with.

The small sample size of 24 Hispanic older adults might not be representative of English speaking Hispanic older adults. A large national survey of racial and ethnic differences in pain contained only 88 Hispanic adults age 55 and older (Portenoy, et al., 2004), however. While 24 participants is a relatively small sample size, the specific sample characteristics of age 60 and older, and chronic osteoarthritis pain provides a more clearly identified group of Hispanic older adults with pain than in previous studies (e.g. Nguyen et al., 2005).

Conclusions

English speaking Hispanic older adults with osteoarthritis pain describe clinically important pain information when given the opportunity to do so. Practitioners should consider initiating the medical visit with an open-ended question about pain for Hispanic older adults with a history of painful conditions such as osteoarthritis. Additional important pain information such as how the pain interferes with daily activities, treatments used for the pain, and treatment effectiveness can be directly inquired about if not spontaneously mentioned by the older adult. A valid and reliable clinical pain measure such as the Brief Pain Inventory Short Form available in Spanish and English could assist in obtaining additional pain information (McDonald, et al., 2008). Practitioners need to actively engage Hispanic older adults in open discussions about pain so they can initiate pain management changes that significantly reduce pain.

References

- American Pain Society. Guidelines for the management of pain in osteoarthritis, rheumatoid arthritis, and juvenile chronic arthritis. Glenview, IL: American Pain Society; 2002.
- Bolen J, Schieb L, Hootman J, Helmick C, Theis K, Murphy L, Langmaid G. Differences in the prevalence and impact of arthritis among racial/ethnic groups in the United States, National Health Interview Survey, 2002, 2003, and 2006. Preventing Chronic Disease Public Health Research, Practice, and Policy. 2010; 7(3):1–5.
- Cleeland C, Gonin R, Baez L, Loerher P, Pandya K. Pain and treatment of pain In minority patients with cancer. *Annals of Internal Medicine*. 1997; 127:813–816.
- Coupland N, Coupland J, Giles H, Henwood K. Accommodating the elderly: Invoking and extending a theory. *Language & Society*. 1988; 17:1–41.
- Fox S, Giles H. Accommodating intergenerational contact: A critique and theoretical model. *Journal of Aging Studies*. 1993; 7:423–451.

- Gerdle B, Björk J, Henriksson C, Bengtsson A. Prevalence of current and chronic pain and their influences upon work and healthcare-seeking: population study. *Journal of Rheumatology*. 2004; 31(7):1399–1406. [PubMed: 15229963]
- Giles H. Accent mobility. A model and some data. *Anthropological Linguistics*. 1973; 15:87–105.
- Im E, Guevera E, Chee W. The pain experience of Hispanic patients with cancer in the United States. *Oncology Nursing Forum*. 2007; 34:861–868. [PubMed: 17723987]
- Im E, Lee S, Liu Y, Lim H, Guevara E, Chee W. A national online forum on ethnic differences in cancer pain experience. *Nursing Research*. 2009; 58:86–94. [PubMed: 19289929]
- Krebs E, Carey T, Weinberger M. Accuracy of the pain numeric scale as a screening test in primary care. *Journal of General Internal Medicine*. 2007; 22:1453–1458. [PubMed: 17668269]
- Krippendorff, K. *Content Analysis an Introduction to Its Methodology*. 2nd ed.. Thousand Oaks, CA: Sage Publications; 2004.
- Maly R, Umezawa Y, Ratliff C, Leake B. Racial/ethnic differences in treatment decision-making and treatment received among older breast carcinoma patients. *Cancer*. 2006; 106:957–965. [PubMed: 16402372]
- McDonald D. Gender and ethnic stereotyping and narcotic analgesic administration. *Research in Nursing & Health*. 1994; 17(1):45–49. [PubMed: 7907799]
- McDonald D, Shea M, Rose L, Fedo J. The effect of pain question phrasing on older adult pain information. *Journal of Pain and Symptom Management*. 2009; 37(6):1050–1060. [PubMed: 19500724]
- McDonald D, Shea M, Fedo J, Rose L, Bacon K, Noble K, Stewart J. Older adult pain communication and the Brief Pain Inventory Short Form. *Journal of Pain Management Nursing*. 2008; 9:154–159.
- McDonald D, Thomas G, Livingston K, Severson J. Assisting older adults to communicate their postoperative pain. *Clinical Nursing Research*. 2005; 14:109–126. [PubMed: 15793271]
- Merkle D, McDonald D. Use of recommended osteoarthritis pain treatments by older adults. *Journal of Advanced Nursing*. 2009; 65 828-235.
- Miaskowski C, Dodd M, West C, Schumacher K, Paul S, Tripathy D, Koo P. Randomized clinical trial of the effectiveness of a self-care intervention to improve cancer pain management. *Journal of Clinical Oncology*. 2004; 22:1713–1720. [PubMed: 15117994]
- Ng B, Dimsdale J, Rollnik J, Shapiro H. The effect of ethnicity on prescriptions for patient-controlled analgesia for postoperative pain. *Pain*. 1996; 66:9–12. [PubMed: 8857626]
- Nguyen M, Ugarte C, Fuller I, Haas G, Portenoy RK. Access to care for chronic pain: Racial and ethnic differences. *The Journal of Pain*. 2005; 6:301–314. [PubMed: 15890632]
- Oliver J, Kravitz R, Kaplan S, Meyers F. Individualized patient education and coaching to improve pain control among cancer outpatients. *Journal of Clinical Oncology*. 2001; 19:2206–2212. [PubMed: 11304773]
- Portenoy R, Ugarte C, Fuller I, Haas G. Population-based survey of pain in the United States: Differences among White, African American, and Hispanic subjects. *The Journal of Pain*. 2004; 5:317–328. [PubMed: 15336636]
- Reyes-Gibby C, Aday L, Todd K, Cleeland C, Anderson K. Pain in aging community-dwelling adults in the United States: Non-Hispanic Whites, non-Hispanic Blacks, and Hispanics. *The Journal of Pain*. 2007; 8:75–84. [PubMed: 16949874]
- Todd K, Lee T, Hoffman J. The effect of ethnicity on physician estimates of pain severity in patients with isolated extremity trauma. *Journal of the American Medical Association*. 1994; 271:925–928. [PubMed: 8120961]
- Todd K, Samaroo N, Hoffman J. Ethnicity as a risk factor for inadequate emergency department analgesia. *Journal of the American Medical Association*. 1993; 269:1537–1539. [PubMed: 8445817]
- U.S. Census Bureau. [Retrieved 2/3/2009]. <http://www.census.gov/hhes/www/poverty/poverty.html>.
- Van Damme S, Crombez G, Lorenz J. Pain draws visual attention to its location: experimental evidence for a threat-related bias. *The Journal of Pain*. 2007; 8:976–982. [PubMed: 17822961]

- Villarruel AM. Mexican-American cultural meanings, expressions, self-care and dependent-care actions associated with experiences of pain. *Research in Nursing & Health*. 1995; 18:427–436. [PubMed: 7676076]
- Zalon M. Comparison of pain measures in surgical patients. *Journal of Nursing Measurement*. 1999; 7:135–152. [PubMed: 10710858]

Table 1

Hispanic Sample Frequencies, Means, and Standard Deviations (N = 24)

Variable	M (SD)	n (%)
Age	71.3 (7.73)	
%Pain Relief*	69.2 (21.25)	
Pain Intensity**	6.0 (1.91)	
Functional Pain***	6.1 (1.99)	
Female		16 (66.7)
Married		8 (33.3)
Race		
White Hispanic		14 (58.3)
Black Hispanic		1 (4.2)
Multiracial Hispanic		9 (37.5)
Education		
< High School		15 (65.2)
High School		5 (21.7)
> High School		3 (13.1)

* Pain relief percentage was measured on the BPI-SF 0 to 100% scale.

** Pain intensity was the computed as the mean of the four BPI-SF 0 – 10 pain intensity items.

*** Functional pain was computed as the mean of the seven BPI-SF 0 – 10 functional interference items.

Table 2

Hispanic Pain Content Frequencies in Response to the Initial Group Differentiated Question

	Total Groups	Group 1*	Group 2**	Group 3***
Pain Content	n = 24	n = 7	n = 9	n = 8
	n (%)	n (%)	n (%)	n (%)
Type	1 (4.2)	1 (14.3)	0 (0)	0 (0)
Quality	0 (0)	0 (0)	0 (0)	0 (0)
Source	1 (4.2)	0 (0)	1 (11.1)	0 (0)
Location	11 (45.8)	5 (81.4)	4 (44.4)	2 (25.0)
Intensity	8 (33.3)	2 (28.6)	5 (55.6)	1 (12.5)
Time	3 (12.5)	2 (28.6)	0 (0)	1 (12.5)
Affect	0 (0)	0 (0)	0 (0)	0 (0)
Lifestyle	1 (4.2)	1 (14.3)	0 (0)	0 (0)
Function	3 (12.5)	3 (42.9)	0 (0)	0 (0)
Treatments	2 (8.3)	2 (28.6)	0 (0)	0 (0)
Glucosamine	0 (0)	0 (0)	0 (0)	0 (0)
Effective	0 (0)	0 (0)	0 (0)	0 (0)
Side Effects	0 (0)	0 (0)	0 (0)	0 (0)
Weight	0 (0)	0 (0)	0 (0)	0 (0)
Exercise	0 (0)	0 (0)	0 (0)	0 (0)
Surgery	0 (0)	0 (0)	0 (0)	0 (0)

* Group 1 "Tell me about your pain, aches, soreness, or discomfort."

** Group 2 "What would you rate your pain aches soreness or discomfort on a scale of 0–10 (0 being no pain and 10 being the worst pain possible)?"

*** Group 3 "How are you feeling?"

Table 3

Hispanic Pain Content Responses to Non-specific* and Pain-specific** Question (N = 24)

Pain Content	Non-Specific Question	Pain Specific Question
	n (%)	n (%)
Type	0 (0)	0 (0)
Quality	0 (0)	2 (8.3)
Source	2 (8.3)	3 (12.5)
Location	11 (45.8)	7 (29.2)
Intensity	5 (20.5)	3 (12.5)
Time	3 (12.5)	3 (12.5)
Affect	2 (8.3)	1 (4.2)
Lifestyle	1 (4.2)	1 (4.2)
Function	5 (20.5)	3 (12.5)
Treatments	4 (18.7)	5 (20.8)
Glucosamine	0 (0)	0 (0)
Effective	2 (8.3)	2 (8.3)
Side Effects	0 (0)	0 (0)
Weight	0 (0)	0 (0)
Exercise	0 (0)	0 (0)
Surgery	0 (0)	0 (0)

*
“What else can you tell me?”

**
“What else can you tell me about your pain, aches, soreness, or discomfort?”

Table 4

Hispanic Frequencies and Means of Pain Communication Strategies Use (N = 24)

Pain Communication Strategy	N (%)	M (SD)
Clarity		
Specific	13 (54.2)	
General	11 (45.8)	
Syntax (Medical Terminology)		
Used	6 (25.0)	
Did Not Use	18 (75.0)	
Explicitness		
Explicit	12 (50.0)	
Not Explicit	12 (50.0)	
Pain Topic Cohesion		
On Topic	19 (79.2)	
Off Topic	5 (20.8)	
Speech Rate *		15.6 (18.0)

* Speech rate was measured to the nearest second.