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Medical Pluralism in the Use of *Sobadores* among Mexican Immigrants to North Carolina

Joanne C. Sandberg¹, Sara A. Quandt², Alan Graham³, Trine Stub⁴, Dana C. Mora¹, and Thomas A. Arcury¹

¹Department of Family and Community Medicine, Wake Forest School of Medicine, Winston-Salem, NC USA 27157

²Department of Epidemiology and Prevention, Division of Public Health Sciences, Wake Forest School of Medicine, Winston-Salem, NC USA 27157

³Graham Chiropractic PLLC, 1300 Ashley Square, Winston-Salem, NC USA 27103

⁴UiT The Arctic University of Norway, Sykehusveien 23, 9037 Tromsø, Norway

Abstract

Background: Mexican immigrants have a rich history of traditional healers. This analysis describes the conditions for which Mexican immigrants seek treatment from *sobadores*, and delineates factors that influence seeking treatment from a *sobador* or a biomedical doctor.

Methods: This systematic qualitative analysis uses interview data collected with 24 adult Mexican immigrants to North Carolina who had been treated by a *sobador* in the previous 2 years.

Results: Immigrants are engaged in medical pluralism, seeking care from *sobadores* and biomedical doctors based on the complaint and patient's age. Using a hierarchy of resort, adults seek treatment from *sobadores* for musculoskeletal pain not involving a fracture. Doctors are first consulted when treating children; *sobadores* are consulted if doctors do not provide culturally appropriate treatment.

Discussion: Mexican immigrants seek care that addresses their culturally determined health concerns. The need to improve access to culturally competent biomedical health care for vulnerable immigrant populations continues.

Keywords

USA; traditional healer; folk medicine; healthcare; manual therapy; integrative medicine; immigrant health; minority health; health disparities

Corresponding Author: Joanne C. Sandberg, PhD, Department of Family and Community Medicine, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157, Phone: 336-716-4308, Fax: 336-716-3206, jsandber@wakehealth.edu.

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The large number of Mexican immigrants in the United States experience health disparities, particularly occupational health disparities [1]. Many of these immigrants are manual workers, disproportionately represented in food preparation, housekeeping, grounds maintenance, agriculture, construction, and food processing occupations [2]. These occupations are physically demanding and place workers at increased risk of musculoskeletal and other injuries [3–5]. At the same time, these immigrants have limited access to biomedical health care because their employers often do not provide health insurance or paid sick leave as benefits, their often contingent and non-standard work schedules do not allow them to seek care at times that health care facilities they can afford are open, and they do not have access to government supported health insurance programs, such as Medicaid or the Health Insurance Marketplace associated with the Affordable Care Act, due to their lack of documentation or their short length of documented residence [6–7]. These immigrants must often seek alternative avenues to address their health problems.

Mexican immigrants to the United States come with a rich history of traditional healers who provide health care outside of western biomedicine. These traditional healers include *curanderos*, *hueseros*, *yerberos*, *espiritualistas*, and *sobadores* [8–13]. *Curanderos* use diverse healing approaches that include physical treatments, psychic healing, spiritual healing, and spiritualism [8–9]. *Hueseros* set broken bones, and treat sprains and muscle pulls [8–9]. *Yerberos* prescribe herbal teas, baths, or poultices to cure physical and mental illnesses [14]. *Espiritualistas* are faith healers who attempt to heal the soul [15].

Sobadores use *sobada* (massage) to care for pulled muscles and injured joints, as well as to move internal organs [10–12, 16–17]. They are widely available and used as traditional healers by Mexican immigrants, Mexican Americans, and other Latino communities in the United States [12, 18]. Studies that have examined the use of *sobadores* by Mexican immigrants in the United States and by Mexican Americans have largely relied on survey data [13, 15, 19–20]. For example, Arcury and colleague [13] found that 43% of Mexican-born adults living in North Carolina reported that they had ever been treated by a *sobador*, with 8% reporting they had been treated within the past year. However, research on the use of *sobadores* among Mexican immigrants to the United States, and how they integrate these traditional healers into the use of biomedicine is limited. Barriers that limit access for Mexican immigrants to the biomedical health care system have the potential to influence use of *sobadores* [21].

Analysis of Mexican immigrants' use of *sobadores* and other traditional healers, and how *sobador* use is integrated in the overall health care regime of these immigrants, is informed by the concepts of medical pluralism and hierarchy of resort. Medical pluralism denotes that multiple models of health and illness exist in a society, that the models have distinct health beliefs and treatment strategies, and that individuals choose among these models for health care based on diverse factors, including availability, cost, and health condition [22–23]. Pluralistic health systems that include biomedical and traditional health beliefs and treatment have been studied in numerous contexts [24–26]. Hierarchy of resort refers to the order in which individuals select the use of different health care models and practices [27–31].

In previous analyses we have discussed the perspective of *sobadores* practicing in North Carolina, including their background, conditions treated, and their understanding of the pathophysiology of their patients' conditions and how their treatments work [17], and we have described the manual therapy elements of *sobadores* practicing in North Carolina, using videotapes of patient treatment sessions [16]. This qualitative analysis uses data from in-depth interviews conducted with Mexican immigrants in North Carolina to address two aims. The first is to describe the conditions for which Mexican immigrants seek treatment from *sobadores*. The second is to delineate the factors influencing the selection of a treatment from a *sobador* compared to a "doctor" (biomedical health care provider).

Methods

Semi-structured in-depth interviews were conducted in 2013 with 24 Mexican-born Latinos living in central North Carolina. Participation was restricted to adults ages 18 and older who reported they had been treated by a *sobador* within the previous two years. Men and women were included in equal numbers. Community contacts helped to identify and recruit participants by introducing them to the interviewer.

The interviewer was a Mexican-American woman who was fluent in Spanish and English. She first screened participants to ensure that they met the inclusion criteria. She then explained that the interview would take about an hour to complete, that it would address their beliefs and treatment by *sobadores*, that the interview would be audio recorded, and that they would receive a \$25 incentive after completing the interview. Written informed consent was obtained. Interviews were conducted in the language of the participants' choice, which was uniformly Spanish. They were conducted in quiet locations of the participants' choosing, often their homes, and ranged between 30 and 90 minutes. The Wake Forest School of Medicine Institutional Review Board approved the project prior to data collection.

The in-depth interview addressed a set of topics related to participants' experiences of treatment provided by a *sobador* (Table 1). Topics included the information about the participant's background, general knowledge about *sobadores* and the treatments they provide, evaluation of *sobador* treatment and comparison with treatment provided by other providers, and participant's general health and access to the biomedical health care system, including health insurance and physicians.

Audio recordings were translated and transcribed. Each transcript was double checked for accuracy by the interviewer, and loaded into ATLAS.ti [32]. The investigators developed an initial coding dictionary listing a set of a priori topics. The set of topics was revised based on initial reading and coding of the transcripts.

Sections of transcripts associated with topics were marked with "tags" that defined that topic. *Health beliefs* referred to any discussion that addressed general health beliefs about traditional healers, chiropractors, and physicians, including the types of conditions each treated, and confidence in or doubts about each type of healer. Tags addressed *financial resources and constraints* and *logistics* for receiving health care. *Input from others* referred to any discussion with others influenced type of care desired and received for self or family

members. It included both verbal communication and actions, such as making an appointment for a spouse to receive treatment. *General evaluation of providers* addressed perceptions about general treatment by different types of providers. *Treatment by sobador* and *treatment by doctor*, referred to actual treatments or diagnoses provided by the relevant type of healer to the participant or family member for a particular injury or set of symptoms. Each transcript was reviewed by two team members to identify text that should be marked with each tag within ATLAS.ti. Any disagreements between team members were resolved through discussion.

Text associated with each topic was extracted separately; text associated with each topic was compared across transcripts. A matrix was developed to record the order in which treatment from a *sobador* or doctor was sought for each participant or their child by type of health issue. Interview quotes are presented to illustrate the results; the participant identification number is listed after each quotation.

Results

Participant Characteristics

By design, all participants were born in Mexico and equal numbers of men and women participated in the study (Table 2). Two-thirds of the participants were less than 40 years old, 87% percent were married or living as married, and most had one or more children. Forty-two percent had less than a seventh-grade education; 20% had at least a high school education. Only one participant reported that he had medical insurance.

Sobador Treatment

The *sobada*, or massage, is the primary treatment used by *sobadores*. Many participants stated that the *sobadores* reduced pain. As one woman stated, her *sobador* “has God’s hands because she does heal the pain; that’s how good she is – very good” (16). However, the *sobada* itself can be painful. One man noted that although the *sobadas* he received were not painful, he had heard “that there are many that make you cry” (24). One woman noted that as she was given the *sobada*, “I was crying from the pain” (20). *Sobadores* often use liquids or creams that become hot when rubbed on patients during *sobadas*. After a *sobada*, an individual is not to get wet because the combination of heat and either cold or water can cause muscle damage and pain. As one participant stated,

I knew I couldn’t get wet nor take a shower until the next day [after the *sobada*] because that’s like hot. They always said that they were taking the cold out that we have in the muscles, that we accumulate too much cold

(1).

Several participants indicated that air could enter muscles, resulting in “air pain”, as could cold. As woman stated, “Maybe you were bending down and when you try to get up suddenly, you get a pain from nowhere and [the *sobador*] tells you that it’s called air pain” (16). Another participant provided an explanation for this. “You get up too fast and the back gets air” (9). *Sobadores* who diagnosis pain as being caused by air generally administer *ventosas* or cupping therapy. Small candles are lit, placed on the painful area, and covered

with a glass to heat and create suction. As one participant stated, this treatment “is supposedly to get rid of the air we have in muscles” (23). Warmth created through friction can also address air pain. *Sobadores* rub a cream on the client using only their hands “until the muscle is hot” to remove air pain (16).

The perceived distinction between *sobadores* and other type of traditional healers varied across participants. Many participants either explicitly affirmed that *hueseros*, bone setters, and *sobadores* refer to the same type of healer, or they used the terms interchangeably. Participants stated, *hueseros* are *sobadores* “because they treat bones” (17); they “give *sobadas* for your joints” (10). A few participants indicated that *curanderos* and *sobadores* are synonymous. *Curanderos* and *sobadores* are the same “because the ladies I’ve gone to see, they do everything. They heal from *empacho*, and they heal with *sobada*, also...from *espanto*” (13). However, other participants distinguished *sobadores* from *curanderos*; these participants reported that *sobadores* restricted their treatment regimen to *sobadas*. One participant indicated that *curanderos* tend to provide treatment using remedies, although another noted that, “the *curandero* focuses more on curing *espanto* witchcraft, while the *sobadores* focuses on bones and *empacho*” (3).

Conditions for which Sobadores Provide Treatment

Musculoskeletal pain—Musculoskeletal pain was the primary reason that patients sought treatment from a *sobador*. Back pain was the most common form of musculoskeletal pain treated by *sobadores*, but they also treated pain in the arms, shoulders, wrists, hands, ankles, knees, and abdominal or pelvic pain. Occupational injuries and repetitive work were reported as leading to musculoskeletal pain. Musculoskeletal pain could be caused by air and by tendon problems or, less frequently, nerve problems. Tendons could be swollen, tight, or out of place. Stress could result in tense tendons or muscles. Injuries, such as sprains, could result in swelling and pain.

Sobadas were administered to treat these musculoskeletal conditions. As one woman stated, “The *sobadora* will give you a *sobada*, she will put the tendon back in place or the nerve that was twisted” (18). *Sobadas* may also be given to stretch tendons or massage swollen joints. Tendons and nerves run throughout the body; therefore, the treatment area frequently extends beyond the joint or region of pain. Several participants reported that *sobadores* would pull joints during treatment. A woman who experienced back pain described the *sobada* she received.

He rubbed me a lot here, all the neck, all the back, everything down to the tip of my feet....He rubbed me with an ointment....When he finishes giving you the *sobada* he pulls all the fingers...and...toes

(21).

Empacho—*Sobadores* also provide abdominal massages to treat *empacho*, a condition perceived to be caused by accumulation of food in the stomach or intestines. *Empacho* symptoms include having a fever, stomach ache, nausea or vomiting, lack of appetite, and constipation or diarrhea.

One knows its *empacho* because your stomach feels inflated, you feel it inflated and it sounds different when you have air. You are also constipated and have stomach aches (3).

In addition to a *sobada*, treating *empacho* often included ingestion of a liquid which may contain olive or castor oil and tea. *Empacho* was usually discussed in the context of children's health. Parents report that children who receive a *sobada* for *empacho* are fine the following day.

Infertility—Many participants had been told by *sobadores* or others that an incorrectly positioned uterus or ovaries may cause infertility. “They tell you that the uterus is fallen, so that if you don’t get a *sobada*, then you can’t get pregnant” (1). One woman posited that hips that were too open or ovaries that were too close to each other resulted in infertility (9). *Sobadas* were perceived as being effective by some because *sobadores* move the affected organ to its correct position. Some participants were aware of these beliefs about infertility but did not endorse them. “They say that maybe I need a *sobada* for [infertility] because I may have a fallen uterus, but I don’t pay much attention to those people” (11).

Other conditions—*Sobadores* treated additional conditions. For example, they treated *espanto*, a chronic condition resulting from a traumatic event, or *susto*, a similar acute condition. *Espanto* and *susto* symptoms included having a thin appearance due to loss of appetite, and acting fearful. Some participants indicated that *sobadores* treated *espanto* and *susto* by adding herbs to beverages or bath water, or rubbing herbs on the body. *Sobadas* and prayers were mentioned infrequently. Inversion (repositioning a fetus), and treatment of *mollera caida* (fallen fontanel) were rarely mentioned.

Treatment by Sobador versus a “Doctor”

Participants differentiated who should be treated by a *sobador* versus a doctor based on health condition and the age of the patient. The term “doctor” (*médico*) was generally used by the participants, but it was used in reference to any western biomedicine health care provider, including physicians, physician assistants, and nurse practitioners, as well as chiropractors. Due to this ambiguity, the term “doctor” is applied here to all of these biomedical health care providers.

Within musculoskeletal injuries, fractures were clearly seen as the province of doctors. Many reported that they would not seek treatment from a *sobador* if a bone might be fractured. A key benefit care provided by a doctor was the use of X-rays to determine whether an individual had a fracture, “I always go to a doctor first to see if the bone is broken” (22). Participants reported that *sobadores* reinforced that potential fractures should be ruled out before *sobador* treatment. “If [*sobadores*] are not sure, then they send the patient to get X-rays, and you go show that to the *sobador*” (6). Additional benefits to seeing doctors for potential fractures or breaks were that they can provide casts and potent pain medication, including injections for intense pain, if needed.

Conversely, participants reported that doctors do not do anything, or do enough, for patients who do not have fractures. Doctors may simply view the X-ray, and then inform the patient that they do not have a problem. They may not provide prescription pain medication, and

may suggest use of over the counter medication. As one woman stated, “They don’t give anything; they just tell you to put ice on it and that’s it” (13). Doctors do not massage the injured part; therefore, participants reported that doctors treat injuries other than broken bones less effectively than *sobadores*.

If you have a twist, a doctor just gives you a pill for the pain, a bandage on the foot or something and it doesn’t get rid of the pain like a *sobada* does; at least we all think the same regarding that. *Sobadas* do take away the inflammation

(18).

Although participants emphasized the importance to having potential fractures treated by doctors, participants also reported that they would see a *sobador* for minor injuries, such as sprains. Participants perceived that *sobadores* could often distinguish between sprains and fractures or breaks, although the participants generally reported that it was important to see a doctor to have an X-ray prior to *sobador* treatment.

Participants reported that doctors do not recognize and, therefore, do not treat some conditions, such as *empacho* and *espanto* or *susto*, effectively. However, parents take their children to doctors when they have a fever, a symptom consistent with *empacho*. But as one participant stated, the “doctors can’t find anything, and the fever doesn’t go away” (13). The parents subsequently take their children to *sobadores* for treatment; the children soon recover.

Aside from *empacho*, air in the back or waist, *espanto*, or *susto*, and infertility, doctors were reported to be the preferred providers for non-musculoskeletal health issues. Participants thought doctors should treat cuts and dog bites, infections, and fevers. One individual stated that doctors should be seen for diseases in general; other participants noted specific conditions that should be treated by doctors, including asthma, kidney problems, diabetes, high blood pressure, headaches, chest pain, cancer, and prenatal care and delivery. As one participant stated,

The *sobador* handles things with their hands and has knowledge of the human body but mostly about bones. But things like cold, cough, those are internal things related with the respiratory system or the general health system of the body; [these conditions] wouldn’t have anything to do with a *sobador*

(2).

Participants frequently thought doctors should treat young children. Children do not have enough experience with different physical problems to distinguish between musculoskeletal issues that needed *sobador* versus doctor’s treatment. Furthermore, very young children’s limited verbal skills do not enable them to convey information that would enable parents to determine whether *sobador* treatments would be appropriate. “Obviously, you can’t ask the kid if he feels his foot is broken or twisted” (21). Seeking treatment from doctors for children’s musculoskeletal injuries may also avoid potential confrontation with authorities.

Selecting Different Health Care Providers

Participants generally viewed *sobadores* who had treated them positively. However, they perceived that *sobador* quality varied substantially. “I can’t really say that I trust *sobadores* 100 percent...because some really know and others are charlatans” (2). One participant whose general perception of *sobadores* was negative stated, “The professional knows what he’s doing and the *sobador* just thinks he knows what you have” (7). Participants therefore felt it important to receive referrals from others who had been treated by a particular *sobador* before seeing him or her. “Well, I go with confidence [to a new *sobador*] because the people that recommend them had told me they had excellent results” (8).

Doctors were considered “professionals;” participants did not mention the need to have references for doctors. “Professional” was used to refer to doctors’ greater knowledge about ailments, in part, due to their education and access to technology. As one woman stated, if she does not know enough about the children’s ailments, it is “better to take them to a professional [than a *sobador*], so [the doctor can] do X-rays because...there are *sobadores* [who] make it worse” (1). The solitary instance in which a *sobador*’s professional status was asserted affirmed that Latinos generally perceived a sharp demarcation between “*sobadores*” and “professionals”. “A *sobadora* stated, ‘I’m a professional *sobadora*.’ And we were shocked because one doesn’t know, right?” (12). Chiropractors’ use of X-rays also placed them in the category of professional.

Structural factors influencing selection—Several structural factors constrained or enabled participants to receive treatment from different kinds of healers. With the exception of one participant who definitively noted that he had medical insurance through his employer, participants indicated they lacked medical insurance. Most participants seeking non-emergency care from doctors were restricted to clinics that provide care to low-income individuals on a sliding scale basis. The clinics provide primary care for little or no cost. Emergency room care is expensive. However, most children had access to medical insurance, enabling parents to bring their children to emergency rooms and clinics without financial distress.

Some *sobadores* did not charge for their services, taking only what the patients wanted to give; other *sobadores* charged, usually from \$15 to \$50 per session. One participant who paid \$20 per *sobador* session noted that treatment by the *sobador* is slightly less than what the clinic charged. Another participant indicated that the *sobador* who had treated him had charged the same as his chiropractor. “That’s why now I try to go to a professional [chiropractor] before going with [sobadores]” (7). However, finances clearly influenced some participants’ decisions to seek a *sobador*. For example, one woman chose to see a *sobador* for a fractured foot because the *sobador* was cheaper than a doctor. When her ankle failed to improve following the *sobada*, she saw an orthopedist, but was able to see the doctor only once due to cost. Participants reported that *sobadores* usually recommended a series of three treatments; however, participants usually ceased treatments when the condition resolved and paid only for treatment received.

Some participants faced logistical challenges to going to biomedical health care appointments. Their work schedules, or that of their partners, could make it difficult to make

appointments during clinic hours. *Sobadores*, unlike doctors, treat patients in the evening, enabling patients to schedule treatments with *sobadores* more easily than with doctors. A few participants noted that it was easier to arrange a same day visit with a *sobador* than with a doctor.

Type of healer selected—Twenty-three participants reported a total of 31 distinct instances in which they received treatment for a musculoskeletal condition from a *sobador* or a doctor. Twenty-two adults reported one or more specific incidents in which they were first treated by a *sobador*; 5 reported one or more incidents in which they were first treated by a doctor. Of these 5 incidents, one individual was transported to a hospital by ambulance following a work accident. Another involved a pregnant woman who sought a doctor's care following a car accident. Eleven adults reported at least one non-musculoskeletal condition that resulted in treatment by a *sobador*, doctor, or both. Doctors were seen for strong allergic reaction, psoriasis, and stress or depression, and pelvic pain. *Sobadores* treated *empacho*, abdominal pain or infertility, and tonsillitis.

Among 10 children from 8 households for whom we have detailed information about treatment received following a musculoskeletal injury and who were treated by a doctor or *sobador*, 6 were taken to a doctor only or prior to being taken to a *sobador*. One of the 6 was seen by a doctor during a visit scheduled for an unrelated purpose. Four children were seen first or only by a *sobador*. Five of 6 children who experienced non-musculoskeletal conditions were initially or only seen by a doctor. Children with a urinary tract infection, headache, or a fever and diarrhea or constipation were seen initially by doctors. When, from the parents' perspective, the doctors' treatment did not improve the condition of three children who experienced fever, diarrhea, or constipation, parents took their children to *sobadores* who treated them for *empacho*. A child who had loss of appetite, yellow complexion, and insomnia was treated only by a *sobador* and diagnosed with *espanto*.

Discussion

Medical pluralism, multiple health care systems that exist alongside each other, is evident in the use of *sobadores* among Mexican immigrants living in North Carolina. *Sobadores* most often treat the musculoskeletal pain experienced by adults as a result of the manual work in which they are engaged. These immigrants have knowledge about traditional and biomedical health systems, they know about and use healers associated with these different health systems, and select treatment options based on their beliefs, experiences, resources, and access. Care must be taken in generalizing this medical pluralism to all Mexican immigrants in North Carolina because only individuals who received treatment from a *sobador* in the previous two years were interviewed. However, previous research indicates that 43% of Mexican-born adults living in North Carolina reported having ever been treated by a *sobador*, with 8% reporting they had been treated within the past year [13]; we can conclude that the use of these traditional healers is common.

This analysis expands our knowledge about how Mexican immigrants talk and think about *sobadores*, and their perceptions about whether *sobadores* are similar to or different than other types of traditional healers. *Sobadores* provide *sobadas*, massages. Participants

consider massages to be therapeutic for musculoskeletal injuries other than breaks and fractures. *Sobadores* often used ointment during massages, treatment that sometimes included pulling clients' joints. *Ventosas* or cupping therapy was also used by some *sobadores* to remove "air." These findings are consistent with data obtained in North Carolina through interviews with *sobadores* [17] and video recordings of *sobador* treatment reported by Graham et al. [16]. *Sobadores* also provide massages to treat *empacho* and infertility. The central role of *sobadas* for treatment of these conditions results in Latinos' consistent identification of these healers as *sobadores*. *Sobadores*' focus on musculoskeletal issues also results of the perception that *sobadores* are bonesetters. Oths [33] notes that terms used to refer to traditional healers may vary.

Sobadas were generally perceived to provide appropriate treatments for musculoskeletal issues unless a bone was fractured, in which case *sobador* treatment was perceived as exacerbating the injury. Participants did not highlight direct risks posed by *sobadas* to treat *empacho* or infertility. They perceived that *sobador* knowledge and skill varied widely; knowledge about *sobador* quality is therefore important. Although not in reference to *sobadores*, researchers have reported that Latinos living in other regions of the United States note the importance of determining traditional healers' skill and knowledge [34–36]. Participants considered doctors to be professionals due to their access to crucial technology such as X-ray machines, and advanced education. This is consistent with Hinojosa's [37] observation that bonesetters and patients in Central America valued knowledge obtained from X-rays.

Participants' perceptions about healer knowledge influenced selection of provider type. Doctors were perceived to be knowledgeable about chronic and acute biomedical illnesses, the preferred provider for cuts, and many internal conditions, including those marked by fevers. However, physicians were not perceived as effectively treating culturally-based conditions such as *empacho* or *espanto* because they did not understand the conditions, unlike *sobadores* or *curanderos*. This position is consistent with perceptions reported by Latino immigrants and migrants in other regions of the United States [34]. The challenge for participants was to determine whose service was needed for which condition. Fevers were under the jurisdiction of doctors until they demonstrated they could not cure the condition immediately. *Sobadores* became the healer of choice when the fever remained and was accompanied by symptoms consistent with *empacho*.

Financial challenges associated with accessing hospital care among Latino immigrants and migrants have been well documented [21, 38]. Structural barriers for our participants included lack of health insurance for treatment outside of clinic settings. However, *sobador* visits could cost as much as co-pays at sliding-fee clinics. The ease of scheduling evening treatments with the *sobador* could ease transportation issues and enable vulnerable workers to receive care [21, 38–39]. The age of the person in need of care appeared to influence the type of healer sought. Participants were more likely to seek biomedical treatment for musculoskeletal issues for children than adults. Access to medical insurance for children through Medicaid may explain some of the variation. Parents' concern about young children's inability to know whether they have a break or sprain and to communicate their sensations effectively may affect parents' decisions to obtain treatment from *sobadores*.

The order in which adults actually sought specific types of healers for themselves and their children suggests that “hierarchies of resort” [27, 30] vary by condition and age of patient. Children were more likely than adults to be taken to doctors rather than *sobadores* for initial treatment of musculoskeletal issues. Adults rarely sought care from doctors for musculoskeletal issues first. Doctors were usually the first healer sought to treat children for any condition and for adults for “internal” conditions consistent with a biomedical model. Doctors were also the first healer sought to treat children for conditions perceived as being consistent with the biomedical model. However, children’s lack of quick recovery from fevers that coincided with gastrointestinal distress led parents’ to reevaluate the type of healer sought.

These findings, juxtaposed against participants’ general statements about their health beliefs and behaviors, suggest that logistical and financial constraints may influence, but do not determine type of treatment sought. Preference for the specific treatment provided by *sobadores* for musculoskeletal issues also appears to influence behavior. Beliefs as well as structural constraints and opportunities appear to influence treatment decisions. Use of traditional healers therefore should not be understood as solely reflecting restricted access.

Few studies have reported that Latinos living in the United States use *sobadores*. Brock and colleagues [38] noted that some migrant farmworkers sought treatment for musculoskeletal pain from *curanderos* and *sobadores* when they returned to their native country, in part due to lack of knowledge about where to find a traditional healer in Georgia. Latino immigrants and migrants in other locations have reported seeking treatment from *curanderos* and *sobadores* in their native country, although not necessarily only in their native countries [13, 19]. This study therefore makes an important contribution to our knowledge about *sobador* use in the United States.

There are limitations to this study. Only Mexicans who had been treated by a *sobador* within the past two years were interviewed. Perspectives held by non-*sobador* users may be quite different. Specific episodes of needing and receiving treatment from *sobadores* or doctors that lacked adequate detail were excluded from the analysis. Self-care strategies were also not addressed. Furthermore, only Mexican-born adults living in North Carolina were interviewed. The study’s method is not designed to generalize across a population. However, this analysis does identify the range of perspectives held among North Carolina *sobador* users about their beliefs about *sobadores*, the conditions for which they perceive treatment should be sought from *sobadores* and doctors, and the type of healers who they actually sought for themselves or their children for specific types of conditions.

This analysis substantially adds to our knowledge about health beliefs and behaviors of Mexican immigrants in their use of traditional healers, particularly *sobadores*. These immigrants are proactive in finding health care that addresses their health concerns and to which they have ready access. Other analysis [16] indicates the potential efficacy of *sobada* for treating musculoskeletal pain. These results further document the continuing need to improve access to biomedical health care for this vulnerable population, and to improve the cultural competency of biomedical health care providers for treating Mexican and other immigrant communities.

Finally, as more “integrative health” practices are established in the United States, the greater inclusion of traditional healing among these should be considered. Several traditional, non-Western healing practices, such as traditional Chinese medicine (e.g., acupuncture, cupping, herbal therapy, and Tai Chi and Qi Gong) and the traditional healing practices specific to Native Americans, are being integrated into the conventional United States health care system. These integrated modalities tend to share three characteristics. First, they have become widely known to the public through popular and professional publications, such as the writings of Andrew Weil. This has created a demand for these modalities in some segments of the United States population. Second, documentation of the clinical efficacy and safety of several modalities has become available through standard clinical research. Third, some individuals are willing to pay for these modalities as unreimbursed costs when they are not covered by their health insurance. Increasing the availability of Latino traditional healing in the United States health care system will require publicity and clinical analysis of its efficacy and safety. This may increase demand for and availability of these modalities.

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Table 1.**Primary Topics Addressed in Interview Guide**

Participant Background
<i>Sobador</i> Treatment
General knowledge about <i>sobadores</i>
Experiences at recent <i>sobador</i> treatments
<i>Sobador</i> Comparison and Evaluation
Conditions for which participant would or would not be treated by a <i>sobador</i>
Perceptions about benefits or problems associated with treatment by a <i>sobador</i>
Comparison of treatment by <i>sobadores</i> to treatment by other providers
Attitude toward having family members treated by a <i>sobador</i>
Health and Health System
Participant's general health
Access to insurance
Experience accessing physicians in the United States

Table 2.

Participant Characteristics, n=24

	n	%
Gender		
Male	12	50
Female	12	50
Age		
Less than 30 years	3	13
30–39 years	13	54
40–49 years	5	20
50 or more years	3	13
Marital Status		
Not currently married	3	13
Married/living as married	21	87
Parental status		
No children	2	8
Children (any age)	22	92
Education		
0–6 grade	10	42
7–11 grade	9	38
12 grade or higher	5	20
Health Insurance		
Health insurance	1	4
No health insurance	21	88
Unclear	2	8