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The Mexican American Sobador, Convergent Disease Discourse, and Pain Validation in South Texas

Servando Z. Hinojosa

This paper examines how Mexican American *sobadores* (folk manual therapists) provide needed health services to South Texas residents. Operating in a region with high levels of workplace injuries, chronic disease, and low levels of insuredness, sobadores offer a kind of attention that is appealing in terms of cost, accessibility, and cultural familiarity. The latter is particularly evident with respect to two factors: convergent ethnophysiological discourse and pain validation. Injured people can approach the sobador with minimal trepidation, in part, because sobadores and clients have shared ways of talking about the body and disease. Clients can also expect that sobadores will not discount their pain experience. Coming from the same socioeconomic background as many of their clients, Mexican American folk manual therapists can appreciate pain in daily life and what effects it can have on wage earners and heads of households. The empathy shown by sobadores facilitates an informal complex of care that, at times, cuts across ethnic lines. This paper uses an ethnographic approach to explore the vocational significance of sobadores to their largely Mexican-American clientele and examines some vectors of exploration that can yet be pursued into manual medicine.

Key words: Mexican Americans, manual medicine, sobador, ethnophysiological discourse, pain validation

Introduction

Many Mexican Americans in south Texas work in non-mainstream healthcare. One such group of individuals, the *sobadores* (manual medicine practitioners), is the focus of this article. Sobadores perform different kinds of massage and therapeutic maneuvers for people suffering from musculoskeletal problems. They work primarily with their hands, but at times offer ritual services to their clients. This article will examine two aspects of the care sobadores provide. It will first review the role that convergent disease discourse plays in their work and will then examine how the validation of pain affects their patronage. Using ethnographic data, I argue that the satisfying treatment encounters that sobadores provide hinge upon how their clients share and/or affirm the sobadores' explanatory models of disease, and upon how sobadores accept their clients' experience of pain.

The way caregivers and clients think about disease, and the way they talk about it with each other, have become important lines of health research. A major push in this direction was the work of Ben-Sira (1980), Kleinman (1980), and Kleinman, Eisenberg, and Good (1978), which alerted us to the structural dynamics of the medical encounter and its effects on treatment efficacy, patient satisfaction, and compliance. Later studies continue this critical assessment of provider-patient interaction, foregrounding power differentials (Lazarus 1988), ethnic dimensions of treatment (LaVeist and Nuru-Jeter 2002; O'Neil 1989), and different explanatory models of disease (Gill 1998; Jezewsky and Poss 2002; Oths 1994). In the folk treatment setting where minimal power and ethnic differences exist between provider and client, the quality of the encounter still depends on how the participants understand disease and illness. I argue that the use of common explanatory models of disease underpins south Texas folk manual medicine. Sobadores enact their knowledge of the body in ways that comply with client expectations. They are allowed to offer care in the first place because they believe what clients tell them, especially when it comes to pain.

Sobadores pay close attention to pain in ways that their clients often say biomedical providers do not. Pain has been a prominent element in biomedical discourse (Aldrich and

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Eccleston 2000; Sullivan 1998), being used not only to estimate general health (Urwin et al. 1998) but also to analyze phenomena like poverty (Brekke, Hjortdahl, and Kvien 2002) and quality of life (Berchuck et al. 1999). When examined in relation to authority structures like biomedicine, pain emerges as an authoritative outcome of approved practice (Greenhalgh 2001; Kirmayer 1994; Scarry 1985). Pain recognition remains central to biomedicine, and its diagnosis is closely controlled (Jackson 1992). In clinical settings, patient pain reports are typically subordinated to quantitative measures of distress, such as zero to ten pain scales or range of motion tests. This makes pain documentation easier, but it creates difficulties for those who suffer chronic pain (Strunin and Boden 2004) and not fully "authenticated" pain, like Repetitive Strain Injury (Reid, Ewan, and Lowy 1991). Aside from forcing pain sufferers to frame their pain in unfamiliar ways, quantitative pain measures highlight the experience gap between themselves and their formal caregivers. For sobadores to accept a client's pain report at face value, then, they must constitute validation of client suffering in the face of structural delegitimation. It reaffirms that the Mexican American sobador treatment encounter is characterized by the credibility sobadores give their clients.

The Sobador as a Regional Specialist

In south Texas, the presence of sobadores and other kinds of folk medicine specialists dates back to the eighteenth century. Mexican Americans and their ancestors have resided in what is now south Texas since at least the mid-1700s when the area was settled by a Spanish subject named José de Escandón. Spanish settlement was heaviest along the lower Rio Grande valley, but the ranching tradition formed the basis of local life and, gradually, Mexican American ranching families came to occupy the area between the mouth of the Rio Grande and San Antonio (Tijerina 1998).

This tradition of rural life in semi-isolated settlements enabled Texas Mexican Americans to become self-sufficient on many fronts over the years, including with respect to food, transportation, religion, and medicine. The work of manual manipulation specialists was invaluable in places far from formal medical care. Their importance, if not their demographic isolation, has lasted till today.

Sobadores, sometimes called *masajistas* (massagers), or simply *curanderos* (curers), are found in almost every community in south Texas. They tend to be older individuals, retired or semi-retired, and occupy lower income brackets, usually relying on fixed incomes that may include retirement and social security checks. Sobadores, as with older Mexican Americans in general, have differing degrees of Western acculturation. Many older Mexican Americans read and speak Spanish but have limited ability with English. This pattern is present among some, but not all, sobadores. Sobadores invariably learn English as their second language, and in their home and work sphere operate mainly in Spanish, the language in which they are most fluent.

A sobador's home is usually his office and clinic. He can expect clients at nearly any time of the day, although he usually receives clients in the mid-to-late afternoon hours and evening, when more people have finished their workday. A sobador will usually receive and treat clients in an area of his home set aside for manual medicine, such as an extra room with a bed. Busier sobadores may build an additional room for treating clients, or even build a curer's cottage in their yard (Hunter and Hunter 1996:306-307).

The Working Landscape of South Texas

Specific demographic and working conditions exist in south Texas, affecting the use of folk manual medicine specialists. It is estimated that of the 22,490,022 inhabitants of Texas, over 7.7 million are Latino, primarily of Mexican descent (USCB 2005). The concentration of people of Mexican descent is especially evident south of San Antonio. These are the people from which sobadores have long been derived.

Ranching, farming, and petroleum interests have historically driven employment in the region (Montejano 1987:189). Cattle raising, heavy machinery operation, auto mechanics, and construction have been the job sectors most accessible to Mexican Americans. Where migrant labor is involved, the work is tedious, physically demanding, and hard to predict. Mexican American employment has, thus, been dominated by heavy machine usage and manual labor in those sectors most prone to industrial risks and physical injury (Pratt and Hard 1998). These kinds of work, especially those in construction, are the kinds of employment associated with the most job-related fatalities (Fabrega and Starkey 2001; NIOSH 2004). The job safety picture is quite poor for people of Mexican descent in the United States, a fact exacerbated by their limited insurance coverage.

According to Graham et al. (2005:541), even though Hispanics have equal rates of "participation in the work force" as whites, only 43% have company health insurance, as compared to 73% of whites. Some estimates put the general rate of uninsurance among people of Mexican descent as high as 49% (Doty and Ives 2002:1). In the counties where this study's sobadores work, Hispanics have rates of uninsurance well over the state overall uninsurance rate of 24.5% (TSDC 2005a). For example, in Nueces County where Corpus Christi is located, 34% of Hispanics are uninsured. Similarly, 30.5% of Hispanics in Duval County, home to San Diego, are uninsured. And in Hidalgo County where Mission is situated, 36.4% of Hispanics lack health insurance (TSDC 2005b). The more limited access to health insurance and caregivers, together with the large presence of Latinos in physically risky occupations, has contributed to poorer Latino health outcomes. Just how much poorer is not known, because while Mexican Americans have greater health and disability disadvantages compared with whites, health and disability research has focused on white, non-Latinos (Peek et al. 2003:415). Not enough is known about how Mexican Americans use formal health resources; the same is true about how they use informal ones.

If Weiner and Ernst's (2004:244) finding that up to two-thirds of those who "suffer from pain associated with arthritis and other muskuloskeletal disorders have used complementary and alternative treatments to control their symptoms" suggests a tendency to seek non-mainstream health care, such informal health seeking among Mexican Americans may be even more pronounced. But the reporting of such use can vary greatly, especially when it comes to reporting traditional health resource use (Doty and Ives 2002; Graham et al. 2005:542). We are, thus, under informed about how Mexican Americans seek informal care for musculoskeletal conditions and disablement.

Subjects and Methods

This study bases its findings upon interactions with three sobadores from three south Texas communities. The chief contributor to this research lives in Corpus Christi, while the other two live in San Diego and Mission. When I met and began interviewing the sobadores in June 1998, the Corpus Christi sobador (Mr. B) was age 65; the San Diego sobador (Mr. M) was age 73; and the Mission sobador (Mr. R.) was age 63. Each is male, Mexican American or Mexican, primarily Spanish-speaking, and retired.

Mutual acquaintances introduced me to the sobadores. Two sobadores were contacted first by phone and one first by a home visit. The ones reached by phone were then visited in their homes. I conducted semi-structured interviews in Spanish and English with the sobadores and, when possible, observed their work. My interaction with the San Diego sobador, for example, consisted of a two-hour visit during which I conversed with him and watched him massage a client. When I met once with the Mission sobador in his home, however, he described his work without demonstrating it. My research came to rely heavily on my interactions with the Corpus Christi sobador, Mr. B, with whom I had much contact between 1998 and 2005.

Mr. B could provide much information because he operated openly and saw a regular, semi-scheduled flow of clients. When I came to his healer's cottage at his invitation, he welcomed me and introduced me to his clients waiting their turn. Many of them, I learned, knew each other from prior visits to Mr. B. I explained my interest in the sobador's work and asked if they would be willing to speak to me and be observed while being treated. They eagerly told me about why they came and consented to being observed. Since Mr. B did all treatments in plain view of other clients, they were quite used to being observed. I asked them about what brought them to Mr. B, what they knew about their condition(s), how often they came, their experience with other caregivers, cost issues, and related matters. I recorded my interview notes and observations in a notebook.

Early on, I was made to feel welcome in Mr. B's home, partly because I conversed freely with the clients who waited for a massage, and because I, too, received massages. This gave me a personal frame of experience for talking about massage with the clients.

Mr. B's observed clients ranged in age from 21 to about 70. One woman also brought her baby for a spiritual cleansing. There were twice as many female clients (18) as male clients (9), with several observed more than once. Three of Mr. B's clients were Anglo (11.1%), all female. His clients included teachers, coaches, a record store attendant, a truck driver, a nurse, a dancer, office workers, students, athletes, a massage therapist, manual laborers, a musician, housewives, and elderly retirees. Some clients had more than one occupation. They presented with complaints including constipation, articular pain, neck stiffness, partial paralysis, bladder problems, amenorrhea, lower back pain, and other conditions.

I spent 12 and one-half hours observing massages at Mr. B's home. Normally, he massaged three to four people an hour. This was coupled to 10 hours of discussion with him and some of his clients, on six occasions, usually away from his home and over a meal. When he would visit my students, nearly twice a year for over four years, I took additional notes on his work and on his accompanying clients who gave testimonials. These 12 discussion sessions totaled an additional 18 hours, through late 2005.

The two main themes of this research emerged during my interactions with the sobadores, particularly with Mr. B. How the body was discussed and how pain was believed became increasingly salient issues as I observed sobadas. For example, Mr. B explained himself using his body and his client's body to help the client directly see and feel what Mr. B was talking about. His bodily approach to client apprehension suggested that he and his clients had shared ways of talking about the body, and that this underpinned his work. Treatment encounters likewise brought out the lived reality of pain. Sobadores placed great importance on hearing how and why their clients were hurting. In Mr. B's case, his various clients even cross-validated one another's pain report, affirming how the client receiving care was indeed suffering. The importance of these issues was reaffirmed during later discussions with Mr. B and his clients.

Key materials from the other two massagers further signaled the operational importance of convergent disease discourse and pain validation among sobadores. The Mission sobador explained, for example, the moon's influence upon the body, while the San Diego sobador articulated how heat affects blood flow and pain migration and the value of self-massage. These sobadores' perspectives helped me frame the two main research themes while identifying the unique views of each massager.

The Sobador in Work and Practice

A variety of people seek help from Mexican American sobadores. Help-seekers are by and large Mexican American, Mexican, or other Latinos, but include Anglo Americans. Most of the sobadores' clients derive from socioeconomic conditions similar to their own and include people working in manual trades like mechanics, construction, and the oilfield. But many people with more formal education also seek

them. Teachers, office workers, nurses, and dancers request the sobadores' help. Younger people like students, athletes, and even cheerleaders are also brought to them.

This paper will discuss the sobadores' work using layman's terminology and terms and concepts sobadores use. The way they talk about the body and therapy differs from biomedical ways of speaking, something important of itself. Clients find familiarity in the way the sobador speaks to them and are reassured by how he listens to them. His interaction with clients before, during, and after massages enables localized, non-clinical ways of talking about disease. Sobadores proffer understandings of the body that their clients already share or can affirm. They, thus, validate the client's perspective from before they even put hand to body.

Massage, Manipulation, and Positioning

Sobadores place great importance on direct manipulation of the body. Since they do not learn about the body's structure through classwork, they do not focus on the visual and mechanically abstract. Sobadores do not rely on X-rays to examine joints, nor do they use instruments to evaluate musculature. They focus instead on the tactile, on what they can apprehend directly through their hands. As one sobador, Mr. B, puts it, "There's a lot of people who take X-rays of their backs, ankles, and knees, but I don't know how to read them. I don't know, my fingers just do the work." Another sobador, Mr. M, when asked if his clients ever bring him X-rays of their injuries, replies, yes, but that "those machines lie." He does not trust radiographs showing injuries he cannot verify with his hands.

For the sobador, the hands are the primary instruments of diagnosis and therapy. In his initial assessment, his hands chart the geography of the body, both topically and internally. He detects variations from the norm in terms of bony contours, ligature, muscular tenderness, edema, and temperature. Visual inspection for physical deformity, swelling, and discoloration adds to the tactile assessment but does not supplant it. The hands work differently in each case, but each case begins with the pain report.

When clients made their pain reports to Mr. B and Mr. M, the reports took an informal tone. Instead of starting with bodily details, clients and sobadores talked about family and work. Only afterwards did sufferers describe how their pain started. Sobadores made eye contact, listened, then nodded as if to show they knew about similar cases. They asked clarifying questions such as, "Does it hurt a lot?"; "Does it hurt when I do this?"; "How long has it been hurting?"; "Can you move your arm like this?"; "Can you walk?"; and so on. Sobadores watched for signs like limping, grimacing, or limited movement to get a better sense of the suffering. Mr. B and Mr. M believed the pain reports they heard. They could recognize pain, including suppressed pain, because they often produced pain as they treated.

Dora, one of Mr. B's Mexican American clients, thus, reported her persistent pains and discomforts when she went to his house. She reported muscular pains in her legs, as well as digestive troubles marked by frequent constipation. Her background in folkloric and flamenco dance helped explain her leg pains, but her digestive symptoms were tied to her hectic office and student life. Dora's pain and discomfort was belied by how she walked normally and looked quite normal. Mr. B nodded as she described her symptoms. She decided to further describe her malaise and its effect on her diet.

With this data, Mr. B began the whole-body massage that he performs on nearly all clients. Dora reclined on a low bed in front of his altar. He applied olive oil to his hands and massaged her feet, calves, knees, and thighs. She then turned on each side, enabling him to massage the side of her thighs and hips. With her again on her back, he massaged her abdomen, ribs, upper pectoral area, shoulders, and arms, and then her neck and face. Turning her facedown, he massaged her entire back and upper buttocks. For most clients this concludes the session; her pain report called for something more.

Mr. B felt that Dora's constipation indicated *empacho* (an intestinal blockage) caused by undigested dough, cheese, or another mass. Until massaged away, this kind of blockage can also cause indigestion and stomach pain. Mr. B swept Dora's entire back and front with an egg; with another person's help, he broke the egg into a bowl. With Dora faceup, he applied more olive oil to her abdomen. Then, he placed the intact yolk on her oiled belly, and slid it around with his hands. When it broke, he said, "There it is." The breakage marked the spot of the empacho. He scooped up the egg yolk with the bowl, wiped the abdomen, and massaged the area. He then turned her over and massaged the corresponding spot on the lower back. Lastly, Mr. B pressed down on the lower back four times, then pinched rolls of flesh between his thumbs and forefingers at the base of the back and released them four times.

Throughout, he told Dora what he was doing, how her dancing was causing leg pains, and how something she ate had caused the empacho. Dora grimaced and agreed. She concurred, especially when she saw the logic of his follow-up instructions. He said that when she got home, she should burn a maize tortilla thoroughly on the *comal* (griddle). She should then wrap the tortilla in foil and pulverize it with a rolling pin. That night Dora needed to take a teaspoon of the powder with a tea of *estafiate* (mugwort). Over the next eight days, she was to take eight more estafiate teas. On the ninth day, she was to take a purgative of *sal de higuera* (Epsom salt) to cleanse her G.I. tract. He sent her home with a bundle of estafiate.

Her case resembled that of another woman, Jennifer, in that high-impact activity had caused leg pain, but Jennifer had no gastric symptoms. A clerk in an engineering firm and part-time student, she was an athlete who ran marathons and half-marathons. Jennifer told Mr. B about her recurrent pain, centered on a shin that had been diagnosed with a hairline fracture. She had no overt physical symptoms; her leg had no swelling, nor did she limp. Mr. B accepted her pain report and agreed that massage could help.

As with his other clients, Mr. B first sat Jennifer on the bed with her back to the altar. He handed her a rosary, stood behind her, placed his hands on her head and shoulder, and prayed silently. A Protestant Anglo American, Jennifer was unused to such ritual but accepted it as Mr. B's way. The prayer seemed to calm her because her shoulders dropped perceptibly, and she nodded slightly when it ended. Ritualistic practices have, in fact, long been known to help assuage anxiety in individuals and their families (Nall and Spielberg 1967:300). The prayer encouraged openness and confidence, and reminded those present that healing is extended to all without judgment.

Jennifer received Mr. B's signature full-body treatment, but he concentrated on the site of her reported pain, her left tibia where the hairline fracture was detectable only as a minute sulcus, a groove or furrow on the bone. The manual work in this area was more than she had received in clinics and was what she had been seeking. Her leg felt differently and continued feeling better later, she reported. Even though she did not come from a folk medicine background, Jennifer agreed with the sobador that massage can benefit injuries caused by athletics. Her presence suggested the dissatisfaction with biomedicine felt even by the non-marginalized in the region.

Mr. M's work also featured attention to pain reporting and informal understandings of the body. One Mexican American man, Balde, presented Mr. M with two pain-causing injuries. Middle-aged Balde had worked many years in the oilfield and now repaired cars. His main complaint was of chronic lower back pain, the result of an injury at a drilling site. The pipe that struck him left no scar, but Balde hurt on most days, especially after exerting himself. His other injury was in his right hand, also caused by an industrial accident. Mr. M understood the severity of Balde's pain. As a thirty-eight year veteran of the Tex Mex Railroad, Mr. M had dealt with many serious jobsite injuries that threatened a person's ability to work.

The treatment room in Mr. M's house only held a twin bed, a bureau with an altar on top, a plastic basin, and a stack of fresh towels. Mr. M poured boiling water into the basin, dipped a towel into it, and wrung it out. He placed Balde facedown on the bed, shirtless, and put the hot towel on his neck and head. Mr. M then told Balde to place a couple of pillows under his stomach to elevate his back.

Mr. M chose this position because he said that when a person is lying on his back, the back is tight and closed. Balde was put facedown to loosen and "open" his back and "release the pain." With the body heated by the towel, Mr. M massaged Balde's neck and occipital area through the towel. Removing the towel, he then massaged the area more deeply, lastly applying commercial Watkins Cream to it. He repeated this on Balde's shoulders and then on his lumbar region, the center of pain. He massaged this area for a long while, and then massaged the sides of the torso and top of the buttocks.

After the initial massaging, Mr. M placed a dry towel on Balde's back and, with a stiff brush, brushed toward the base of the spine. He did this because "the blood heats up and scatters, the brush is so that the blood circulates properly." Brushing restored the circulation from the effects of heating. Mr. M wanted to control pain migration. He said, "I don't want the pains up here, high on the back, to join up with the pains down here, low on the back." For him, if the back pain *must* migrate, it should move down the back, not up. The massaging and brushing were to prevent the upward migration of the lumbar pain.

Turning to Balde's limb mobility, Mr. M placed Balde on his back, and had him flex each leg and bring the knee as close to its corresponding shoulder as possible. Balde struggled to do this. Mr. M took each leg, extended it, flexed it, and pushed the knee across the torso towards the opposite shoulder. He developed a stronger sense of Balde's range of motion. He explored this further by having Balde stand and pivot his torso, restricting movement to the lower back. Localized massage at pain sites, brushing through the shirt, and further movement of the shoulders and hips followed.

Turning to Balde's hand and wrist pain, Mr. B applied heat and massage to it and showed Balde how to exercise and massage it at home. Balde liked the idea of self-massage; it seemed direct and practical. He also seemed to agree with Mr. M that blood flow was important to pain relief, and that brushing can affect pain distribution.

During treatments, it was not uncommon to see clients wince as the sobador worked sensitive areas. Other clients might hear muffled cries or even screams, but they already knew massages could be uncomfortable and painful. But since non-treatment could be even more painful, debilitating, and costly in the long run, they accepted the massages. Evidence suggests, to this effect, that people seek the musculoskeletal care they think will be most affordable and least dangerous, even if it is painful in the short run (Eshiet et al. 2004). Mr. B's clients, indeed, often reported that, until they came to him and let him work deeply on them, their conditions were not improving and were even worsening under formal care. They had feared their jobs and income would suffer next.

The Use of Space and Materials

An important use of space can be observed among sobadores. In Mr. M's and Mr. B's treatment rooms, the family is included in the immediate vicinity of the client to lend support or a hand. Family is not asked to wait outside but to participate (see Mull and Mull 1983:734; Oths 1994:105). Mr. B goes further. He places his treatment bed in front of the altar, in the center of the curer's cottage where it is surrounded by people and families waiting their turn. By putting the bed in the center of the room, Mr. B also precludes any hint of impropriety from the encounter and makes the help-seeker the therapeutic focus of the room.

The products sobadores use are basic and readily available, such as water, towels, olive oil, sugar, salt, and estafiate. Ritual items like candles, Catholic imagery, eggs, and lemons figure prominently. Sometimes clients bring these to the sobadores, or the sobadores supply them. By bringing candles of

favorite saints, the clients can involve these divine figures in their healing and recovery. The many saint candles, rosaries, and prayer cards clients have placed on sobador altars for this purpose are vivid reminders of the beliefs held in common by sobadores and clients about how supernatural forces act upon the body. To some extent, these items also suggest how clients attribute only a partial effectiveness to formal care providers. Still, sobadores conditionally accept some of the biomedical world's material resources.

Part of the evolving character of folk manual medicine is its incorporation of Western pharmaceuticals and materials. Products that have entered the sobador's repertoire include bandages, liniments (like Watkins Cream, Vaseline Intensive Care Lotion, rubbing alcohol, Thera Gesic lotion, baby oil, veterinary unguent), and pharmaceuticals like acetaminophen, aspirin, and Epsom salts (see Anderson 1987:44; Trotter and Chavira 1981:55). Of note also are the human anatomical charts Mr. B and Mr. M keep by their home altars. Similar models have been found in other curers' homes (Mull and Mull 1983:734), but there is no biomedical equipment or special beds in the sobador workspace. Sobadores seem to know that sufferers want their hands-on care, not costly furnishings.

Also in keeping with client needs, sobadores charge modest fees. At one end of the scale is Mr. B, who in 1998 charged $10 for a full body massage. Around 2002, this fee doubled. Mr. R asks clients for something to help him "buy more medicine," about $3. Mr. M, meanwhile, does not ask for anything. He says that with his pension, his needs are covered, and that with an occasional person (a "gringo," as he puts it) volunteering up to $100, he does not have to charge the poor. Each sobador says that some of their clients cannot pay anything. Paying clients repeatedly say the sobadores are far more affordable to them than clinicians.

Sobadores try to keep their costs low for clients and their doors open to select biomedical elements. This pragmatic approach to service is also reflected in how sobador clients regard Western healthcare providers. While most sobador clients have also received formal care, Mr. B's clients tend to visit formal caregivers first and then seek his help. But persons who visit a physician and then visit a curer do not necessarily stop seeking formal care; many continue seeking it (Mikhail 1994:634; Padilla et al. 2001:1336). Clients see no conflict in this. They have no competing prescriptions from the two caregivers to worry over, nor do they feel sobadores will undo the formal caregiver's work. More often, clients say that their formal caregivers are not doing enough for them and that the caregivers do not even speak the same language, figuratively, as they.

Convergent Ethnophysiological Discourse

When sobadores and their clients talk about the body, they usually understand one another. This cannot be said as readily about formal caregivers and clients. In clinics, medical terminology use can create an atmosphere of confusion and intimidation, limiting the clients' understanding of how caregivers view the body (McCormack et al. 1997; Thompson and Pledger 1993). Its use also creates a space unwelcoming to popular ideas about the body, as many Latinos have found. Given this, the unencumbered communication with the sobador creates a different experience. Help-seekers can relate to the sobador's ways of talking about the body and disease. They recognize some of their own knowledge in what he says and can develop a sense of engagement with their treatment. Even if the sobador uses unfamiliar words, or familiar words in unique ways, he explains them very clearly. He may use his own body as an example or show how connective tissues and "pressure points" work by pressing these on clients' bodies and pointing out their own reactions. This section examines how a shared disease or ethnophysiological discourse underpins the sobador's treatment encounter and sets the stage for a meaningful manual therapy experience.

Local understandings of the body operate in different cultures (Devisch 1993; Jordan 1989; López-Austin 1988). Unique meanings have been applied to the ideas of ligaments, muscles, blood, and heat, for example (Oths and Hinojosa 2004). Mexican American sobadores are interested in entities like these, but not always in Western ways. Their views of the body differ with respect to ideas of empacho, *caída de mollera* (fallen fontanelle), and hot-cold valences, among other things. To frame how sobadores relate to clients via a conceptual common ground, I will briefly explain these constructs. Then, I will offer a view of the sobadores' bodily ideas and how they converge with those of clients.

Discussion of Mexican American ethnophysiology has often been confined to descriptions of culture-bound syndromes like empacho and fallen fontanelle, and of hot-cold valences. Empacho is a condition attributed to a gastric blockage caused by undigested food. Abdominal pain, indigestion, and constipation often point to this. Treatment emphasizes abdominal massage and a pinching-and-releasing of the flesh of the lower back (Mikhail 1994:631; Mull and Mull 1983:731). These treatments are found across the southwest, suggesting conformity of physiological beliefs between clients and curers, especially within given regions (Weller and Baer 2001:215, 221). Local understandings of the body are also expressed through fallen fontanelle (Trotter and Chavira 1981). This physical disorder, in which an infant's inter-cranial gap becomes depressed, is treated either by sucking on the child's crown, by pressing his hard palate upward, or by other means.

Also associated with Mexican American ethnophysiology are hot and cold valences. Kay and Yoder (1987) have documented these valences in the southwest, but their exact origin is unclear (Foster 1987; López-Austin 1988). Not necessarily relating to temperature, these qualities have been assigned to things like foods and the environment, as well as the body. During sobador treatments today, clients sometimes connect features of their cases to hot and cold ideas, even though this distinction is not the diagnostic axis of the encounters.

Sobadores express ideas like these in different ways, and how they express them affects their care delivery because the more they vocalize ideas shared by clients, the more clients can participate in the care. A look at the sobadores' operational knowledge of the body reveals how sobadores appeal to clients as much by their familiarity to them as by their distance from biomedicine.

Mr. B sees the body as bound by a network of *cuerdas*, glossed as tendons, ligaments, tubes, or even "freeways." Cuerdas run from the toe tips, along the top of the feet and up the front of the shins and thighs till they meet the trunk. From there they extend around the hips to the buttocks. They also run from the toes, along the soles of the feet, around the heels and up the back of the legs, reaching the buttocks about where the front-emanating cuerdas have reached. The cuerdas meet the torso at places called *ancordias* (attachment points for the cuerdas, as well as pressure points). Cuerdas reach from these ancordias to the sides of the rib cage, and up under the arms to other ancordias. The arms, like the legs, have cuerdas along their inner and outer sides. Cuerdas located on the inner side of the arms arrive at the rib cage ancordias, and then go just under the breast to the sternum. They then go up to the temporomandibular joint or a place called the "glands," and to under the ears. Cuerdas on the outer side of the arm extend over the shoulder and up to the neck.

Cuerdas function in body movement, blood flow, and nutrition delivery. Baring his arm and wiggling his fingers, Mr. B shows how cuerdas enable movement. He notes the structural parallels in the limbs: "Your hand is your foot; your wrist is your ankle." One limb's problems are mirrored in another. He says, "In your hand it's called carpal tunnel, and in your foot it's called heel spur, but the name is different only." The cuerdas' role in blood flow is revealed when "calcium deposits" form in the neck. If these keep blood from reaching the brain, strokes can result. Mr. B said as he massaged:

> This is the illness of most of the people: they have their ligaments…they go to the pressure points, calcium deposits, and accumulate there, they form some balls, knots, and they [block] the system and the blood doesn't circulate. When there's no circulation you have stroke, like her [a client in a wheelchair].

Cuerdas in their tendon aspect can become "tight" with calcium deposits, causing varicose veins. When calcium deposits emerge onto the skin, they resemble nail clippings. If cuerdas are injured, their function as pathways of nutrition is hindered. Mr. B explains, "The body takes juice from the stomach from what you eat; it feeds your whole body. When you sprain yourself, and your fingers get like this [twisted], the food will no longer pass through." Some therapies, then, must unblock the cuerdas to restore nutritional flow. Cuerda blockages in the form of calcium deposits or *flemones* (ball-like accretions) account for many bodily problems.

Much of his massage either unblocks cuerdas or keeps them clear. He talks about the body's cuerda structure with clients, and, following his visual and tactile form of explanation, they usually concur with him. For example, when he flexes his fingers and points to the cuerdas rippling his skin, several clients nod in recognition. When he talks about calcium deposits blocking blood to the brain, people offer accounts of relatives who suffered strokes caused by vessel impairments. His description of excreted calcium deposits is met with gestures of agreement; for some, these deposits explain rough spots on the skin. When Mr. B explains the body's biomechanics, it is not uncommon for clients to respond by flexing or touching their own body parts he is talking about, agreeing verbally with him, and even emphatically reporting how it hurts in the ways he describes. A 23 year-old Mexican American woman named Betsy, for instance, described how Mr. B really knew how ligament connections run from the calf up to the back. She told me how he would press on a certain point on her calf and she would feel it in her back.

Mr. B also discusses convincingly how ancordias can be very sensitive. He reports that the ancordias on the sides of the ribs are pressure points. If these are struck, the lungs cannot work, and the person feels like he has lost his breath. When boxers get hit there, he says, they lose their wind and go down. This explanation encourages the idea that, if clients have asthma or feel breathless, their rib ancordias need massage. In ways like this Mr. B says the body needs maintenance, something we only realize too late. He quips, "Whenever you give a tune-up to your car, your body needs it too."

Mr. M has a similar repair-and-maintenance approach, but he focuses on *nervios* (connections spanning the body that activate movement and can cause pain), blood, heat, and *aire* (air in an ethereal, cold, and penetrative aspect), and not cuerdas. Like nerves, nervios are most noticed when they get "pinched." Mr. M describes the nervio in terms of back pain: "It is a really tiny thing that gets pinched like this. Something the thickness of a thread gets pinched." Many clients know the term, "pinched nerve," and report this kind of pain. Mr. M's idea of nervios is partly echoed by Mr. R. Mr. R says that when he massages down a person's back, "the nervios are felt by the fingers." He feels *bolitas* (balls, knots) form, which "untangle" as he rubs them. Mr. M says, though, that his clients' bodies have a certain "tightening," not bolitas, which he "opens up" through correct positioning and massage. And since massage and hot towels scatter the client's blood, as well as move the pain, Mr. M must restore the blood by brushing.

Mr. M's treatments include movement of joints to the limit of their range of motion. He sometimes isolates joints and uses movements akin to what Anderson (1987:44) calls chiropractor-like manipulations, like when he presses a knee diagonally across the torso. Manipulation is needed for nervio pain, but not all pain is due to nervios. Fat buildup can feel like a pinched nervio. Mr. M explains, "The fat builds up in the heel and forms a *bola* (ball, mass); it isn't a nervio." He calls this a heel spur. He treats it by placing a towel soaked in hot water on the floor. The client then places his bare heel on the towel, stands on it, and rocks it side-to-side, and back-and-forth "like you're stomping a cigarette butt."

Heat clearly plays a large role in Mr. M's work. Heat provides comfort and works directly and therapeutically on the nervios. Mr. M insists that massage should "never be cold; the nervios should be moistened." The hot towels "loosen up" the nervios and the body.

Heat also counters the effects of aire. Aire is in our surroundings and is thought by Mexican Americans to cause bodily malaise, especially in the joints and spine. Since aire makes the body hurt, Mr. M says not to massage in cold rooms. Mr. B, however, shows little concern for room temperature, though he knows aire can enter the body. In fact, Mr. B says that when he massages the spine and it pops, aire is coming out. It can also build up in the trunk and cause pain. There are times when he massages the torso and "You burp through the back," i.e., pass gas. This evidences, for clients, aire buildup.

Mexican American clients likewise agree with sobadores that the moon affects the body's resistance, in keeping with local folk knowledge. Mr. R stressed that during a *luna maciza* (strong or full moon), people do not get injured very much, but "when the moon is tender/new, more injured people arrive." Plants and animals are similarly affected, becoming feebler during new moons. Sobadores back the idea that the body, like other bodies in nature, is subject to lunar influence (see Dodson 1984:42; Hunter and Hunter 1996:298, 309).

Whether considering traumatic, environmental, or cosmic disease causality, sobadores talk with their clients as they reveal and enact understandings of the body. They use ideas either shared by clients or that appeal to them. They, thus, remain friendly to clients' models of body and disease. But these models are not static. White (2005) argues that not only can folk models change, but they can change as clients interact with others, including clinicians. These models can keep changing through contact with folk healers. What is unlikely to change, though, is that people want their pain to be taken seriously.

Pain and its Validation

Pain sufferers want to be believed. Many pain sufferers that seek sobadores have known clinicians who, they say, have not taken their pain reports seriously. This limited pain validation has discouraged some Mexican Americans from relying on formal care, prompting some to seek a folk alternative. I discuss below how people experience problems with biomedicine because of the way it operationalizes pain, how sobador clients regard the practical consequences of pain, and how sobadores help clients with the larger experience of pain. I argue that the folk treatment experience is greatly enhanced by the credibility sobadores give their clients.

Many people live with pain and, according to Weiner and Ernst (2004:244), "musculoskeletal disorders are the most common pathologic conditions causing persistent pain." These disorders not only cause pain, they are the number one cause of disability for people from 18 to 65 years of age (Rizzo, Abbott, and Berger 1998:1471). Back pain is especially significant in this regard. In the United States, 10.9 percent of all visits to physicians are for musculoskeletal problems, and two percent of these visits are due to back pain (Jette and Delitto 1997:142). By one estimate, 31 million Americans are affected by back pain (Rizzo, Abbott, and Berger 1998:1471), whether or not they are considered disabled.

The number of chronic musculoskeletal pain sufferers is high, but their clinical options are few and usually center on drugs. Non-steroidal anti-inflammatory drugs (NSAIDS) and opioids are often used to treat pain, despite their potentially harmful side effects. These treatments are sometimes discontinued due to adverse reactions or lack of efficacy (Weiner and Ernst 2004:244). Use of NSAIDS has been cast by physicians as a way to gain time to let patients' conditions "settle down" on their own (Roberts, Adebajo, and Long 2002:506), raising doubts about the drugs' long-term usefulness. The mere availability of drugs has often justified their ongoing use, but as with other technologies, they can interfere with caregiving more than they help.

When pain sufferers seek help from clinicians, they want for clinicians to hear their pain narratives and to accept them. Quite often, though, help-seekers remain unvalidated in their pain narratives to physicians who rely on tests, scales, and scans to find the "actual" state of patient suffering. Mr. B's clients note the physician's over-reliance on technology to assess pain and mobility: "He [the physician] gave me a test, a test with my legs, and he said, 'there's nothing wrong with you, your legs are moving', but I couldn't walk" (Omar). Another client reported, "They did every test on me. The doctor said, 'you're fine, there's nothing wrong with you.' But if you know my body, you'd know there was something" (Carlos). A woman was asked by her physician to rate her pain on a zero to ten scale. She gave him an answer, but told me, "My right arm to my elbow was in severe pain, a pain I can't describe" (Elena). Reflecting this sense that physicians do not listen to pain reports, one young client of Mr. B outright refused to see a physician for a hyperflexed ankle and shoulder injury because, "I've messed up my hands and my ankles so much that I know what they're going to say: 'just ice it and stay off it'" (Pablo). These accounts are not unique (Luna 2003:336) and point to a growing distance between reported- and clinically-confirmed pain. They also point to the limitations of pain measurement tools.

As in the latter case, physicians routinely ask patients to rate their pain on a zero to ten scale or to rate their mobility in terms of a percent (Reid, Ewan, and Lowy 1991:605). Using pain scales promotes the idea among patients and clinicians that the scales effectively translate patient experience onto paper. But while these scales may evince easy-to-record numerical values, they can exclude other vicissitudes of pain, such as periodicity and migration.

The very act of reporting pain hinges upon these and other factors that vary between people. As Devor (2005:18) argues, different things go into a person's "pain report." The report may depend upon the primary nociceptive signal, upon the central modulation of the signal, and upon the non-calibrated

qualia (perceptual qualities of feeling). Variability between individuals can exist at any of these stages, so a zero to ten pain scale is not reliable from person to person. Pain remains qualitatively felt and hard to calibrate. In addition, pain scales like the Chronic Pain Coping inventory that measures pain coping strategies are subject to comparison with other scales, validation testing, and modification (Higham et al. 1999). They leave room for uncertainty across time and between clinics.

Pain scales and measurement tools are also valued differently by clinicians, for instance, when assessing pain among older vs. younger adults (Herr et al. 2004), or when assessing pain among low back pain sufferers (Resnik and Dobrykowski 2005). Per the latter, creating pain measurement systems specific to one kind of pain entails additional problems, as has been pointed out in reference to knee pain (Underwood 2004:2). Since people often have more than one site of musculoskeletal pain at the same time, or even overall pain, relying on a pain measure focused on one site of pain may be too limited.

Reported pain is not used as a guide in uniform ways by primary and auxiliary health care providers, either. For example, among some formal manual therapists like physical therapists, the degree of motion achieved is more important an outcome than pain in response to passive motion (Fitzgerald et al. 1994:227). Even among manual therapists with comparable United States training, then, pain is taken into account differently.

What does this mean for pain sufferers in the formal sector? They can expect different providers to respond differently to their pain reports or even dispute their pain. So long as different providers gauge pain differently and rely on institutional pain criteria, sufferers are likely to feel unbelieved. Roberts, Adebajo, and Long (2002:507) point out, "It is necessary to recognize the need for a multidisciplinary pain relief service in chronic conditions." Achieving this may depend on how well providers agree upon pain parameters meaningful to themselves and their clients. Without the development of shared ways of measuring pain, it is doubtful that clients will feel validated as pain sufferers. They will instead worry about what living with pain will entail.

Sobadores' clients often express concern that their pain and limitations will keep them from working and will become worse. Studies indicate, in support of this fear, that among older Mexican Americans, "functional limitations are predictive of future disability status" (Peek et al. 2003:414). This is especially true with limitations of the lower body, which interferes with mobility and is considered a step towards Activities of Daily Living disability (Peek et al. 2003:421).

Other research affirms that for chronic pain sufferers, lack of belief in their "own ability to manage pain, cope, and function despite persistent pain" can be a significant predictor of the extent to which they may become disabled and/or depressed (Berchuck et al. 1999:483). The more persons suffer functional limitations and worry that their chronic pain cannot be eased, the more likely their conditions will become permanent disabilities. With the finding that, even among people without musculoskeletal morbidity, physical disability increases with age (Urwin et al. 1998:654), a sobering picture emerges of what functional limitations, poor confidence, and aging can mean for a person's health future. This is evident in Omar's case.

When elderly Omar lost his ability to walk, stand, or use his right arm after a yard accident, he feared he would become disabled. He grew hopeful, though, when his doctor told him to find a massager. After several weeks of sobador treatment, Omar regained much of his mobility. Years later he said of his injury, "I thought it was gonna be the end of me. I couldn't move, I couldn't walk, I couldn't move my fingers. Now I can do this, and I can make a living." As a professional musician, Omar's livelihood was his trumpet. Now able to walk with a cane or walker, he credits his improvement to how Mr. B. really shared his concern not only with walking and standing, but also with doing other things that mattered, like playing music. To Omar, the sobador understood his predicament and determined to get him back to work.

Even for the non-elderly, disability can be a threat, especially when malaise is sudden and etiology is unclear. In the case of Carlos, a teacher/coach in his thirties, he had for years received Mr. B's care for soccer and tennis injuries. Then he developed chest pains and high blood pressure that only worsened with drugs. Carlos said this was compounded by severe weight loss, sleeplessness, and even nightmares, and that only Mr. B understood his deep distress. The sobador's attention to Carlos' reported pain enabled Carlos to "feel normal" again. As Carlos put it, "I always knew I could count on him [Mr. B] to fix me."

The sobador's validating and treating of pain and limitations, when clients first report them, matter both in terms of the need for pain recognition and of averting more serious conditions. The latter include social conditions encompassing the larger disability/limited ability crisis. For example, living with chronic back pain can produce feelings of anger, depression, and marital strain. There can be the loss of gendered social roles for men when they are no longer the providers, and for women when they either cannot work as housekeepers or outside the house (Strunin and Bowden 2004:1388-1389).

To this effect, Reid, Ewan, and Lowy (1991) explore how assembly plant women workers have felt the trauma of Repetitive Strain Injury (RSI) and of not being taken seriously. Women reporting pain were treated with skepticism and derision not only by physicians, but by co-workers who thought they were abusing the workers compensation system. Because their conditions went unvalidated, they worsened, and their "path through the medical system ...became a pilgrimage in search of moral affirmation" (Reid, Ewan, and Lowy 1991:602). To be told that RSI was not "real" pain was only the beginning of the social crises for the women.

The social dimension of musculoskeletal pain is highlighted in Mr. B's placing the treatment bed in the center of his healing cottage where all can see the treatments. This is

emblematic of how local people consider pain and injuries of group concern and to be validated by the community. A chronic or degenerative condition can be worse than an acute one because it affects the entire family for a long time. With the bed in the center, the client is placed in the midst of the supportive community, which can then recognize his condition. The sobador moderates the social crisis of pain by validating the pain and reifying the causative disease or injury, partly deflecting blame away from the sufferer. He meets the sufferers' needs not simply in terms of their quest for treatment, but in their basic "search for relief, belief, and understanding" (Reid, Ewan, and Lowy 1991:609).

Concluding Remarks

Many south Texans with musculoskeletal problems find sobadores helpful for treating and managing their conditions. The sobador discusses disease and the body in ways that help seekers can recognize, vocalizing a shared or convergent view of the body. He does this convincingly because he accepts their pain reports, validating their suffering. This explains why Mexican Americans often welcome sobadores as adjunct, or even primary, caregivers. With sobadores, clients understand what is being discussed, and feel that they are understood as well. (In appreciation for Mr. B's help, in fact, Omar composed a *corrido* [folk ballad] for Mr. B.) The medical sector, meanwhile, remains distant from this approach to care.

Clients of sobadores comment, in fact, that their formal providers do not or cannot understand the kind of hands-on work sobadores do, underscoring how the medical sector places relatively little emphasis on the tactile in diagnosis and therapy, preferring X-rays over manual palpation, and sonograms over a midwife's hands (Hinojosa 2002:35). Hands-on activities like "massage" and "physical/occupational therapy" become low-prestige modalities in this scheme, and people associated with these are accorded lower status. It is no surprise, then, that physicians outsource massage. Several sobador clients relate that when their medical care was unsatisfactory or slow in producing results, their physicians suggested they find a formal massager.

With this prevailing view of manual modalities, it follows that clinicians have not fully explored manual manipulation and massage for chronic conditions. Some researchers have made inroads into these areas, but healthcare opinion is divided, for instance, about whether manual therapies for lower back and neck pain produce more satisfactory results for patients than does continued care by a general practitioner, the latter involving analgesics, counseling, and education. Some studies have argued against the effectiveness of manipulative therapies (Ernst 2004; Weiner and Ernst 2004), while others have argued strongly for it (Hoving et al. 2002; Jette and Delitto 1997). More conclusive studies may require manual placebo treatments to be part of the overall design, as some researchers suggest (Hawk et al. 2002).

Research into massage, meanwhile, has proven massage therapy a helpful adjunct to conventional care. Davis (1996), for example, finds massage to be one of a series of strategies for relieving muscle tension, helping those suffering chronic, non-malignant pain. Evidence suggests that massage may be helpful for cancer pain management, especially for males (Weinrich and Weinrich 1990:143-144), and with hospitalized patients, in general (Smith et al. 1999). Multidisciplinary pain management strategies that include massage therapies have even been shown to lead to significant improvements in acute and chronic back pain at a lower cost than conventional care (Weintraub 1992).

Systematic study of the effects of folk manual therapies, meanwhile, has been more limited. One front in this work focused on the different effects of physiotherapy, light exercise therapy, and traditional bonesetting upon chronic back pain. It found that bonesetting had "more marked long-term effects on subjective measures of back pain and disability" (Hemmila et al. 2002:101), revealed through greater reported patient satisfaction. This contrasts, though, with studies showing unclear results at best from the use of folk manual therapies, for instance in Bali (Anderson and Klein 2004) and Africa (Onuminya et al. 2000; Tijssen 1979). As these studies suggest, exploration of the landscape of manual medicine is very incomplete.

If our understanding of the body as the locus of healing remains limited, our understanding of the body as an *instrument* of healing is still more limited. Observers of therapeutic touch (Wilkinson et al. 2002) and acupressure (Hsieh et al. 2006) note the primacy of the body as an instrument of healing, and even how the healing process can enable an exploration of self and of relationships with others. These modalities speak to healing philosophies long preserved outside the Western canon.

While the scarcity of formal health resources has contributed to the emergence of folk manual medicine among Mexican Americans, folk massage will continue to exist even where formal facilities exist. This is because sobadores provide clients with something they do not get in formal settings. The sobador attends to the client in the client's larger role as a member of a family and community and, ultimately, as a person with his own vocational roles to fill.

References

Aldrich, Sarah, and Chris Eccleston
2000 Making Sense of Everyday Pain. Social Science and Medicine 50(11):1631-1641.

Anderson, Robert T.
1987 The Treatment of Musculoskeletal Disorders by a Mexican Bonesetter (Sobador). Social Science and Medicine 24(1):43-46.

Anderson, Robert T., and Norman Klein
2004 Two Ethnographers and one Bonesetter in Bali. *In* Healing by Hand: Manual Medicine and Bonesetting in Global Perspective. Kathryn S. Oths and Servando Z. Hinojosa, eds. Pp. 157-169. Walnut Grove, Calif.: AltaMira Press.

Ben-Sira, Zeev
1980 Affective and Instrumental Components in the Physician-Patient Relationship: An Additional Dimension of Interaction Theory. Journal of Health and Social Behavior 21(2):170-180.

Berchuck, A., M. E. Carney, P. A. Futreal, P. Arnstein, M. Caudill, C. L. Mandle, A. Norris, and R. Beasley
1999 Self Efficacy as a Mediator of the Relationship between Pain Intensity, Disability, and Depression in Chronic Pain Patients. Pain 80(3):483-491.

Brekke, Mette, Per Hjortdahl, and Tore K. Kvien
2002 Severity of Musculoskeletal Pain: Relations to Socioeconomic Inequality. Social Science and Medicine 54(2):221-228.

Davis, Andrea L.
1996 Primary Care Management of Chronic Musculoskeletal Pain. Nurse Practitioner 21(8):72-82.

Devisch, René
1993 Weaving the Threads of Life: The Khita Gyn-Eco-Logical Healing Cult among the Yaka. Chicago and London: The University of Chicago Press.

Devor, Marshall
2005 Pain is Perception-Calibrating Qualia. Journal of Neuropathic Pain and Symptom Palliation 1(1):17-18.

Dodson, Ruth
[1951]1984 Don Pedrito Jaramillo: The Curandero of Los Olmos. *In* The Healer of Los Olmos and Other Mexican Lore. Wilson M. Hudson, ed. Pp. 9-70. Dallas, Tex.: Southern Methodist University Press.

Doty, Michelle, and Brett L. Ives
2002 Quality of Health Care for Hispanic Populations. URL:<http://www.cmwf.org> (March 27, 2004).

Ernst, E.
2004 Manual Therapies for Pain Control: Chiropractic and Massage. Clinical Journal of Pain 20(1):8-12.

Eshiet, A. I., A. M. Udosen, I. U. Ilor, O. E. Ngim, and S. G. Akpan
2004 Methods of Pain Management by Traditional Bonesetters: Experiences in the South-South Zone of Nigeria. Nigerian Journal of Orthopaedics and Trauma 3(2):176-184.

Fabrega, Victor, and Serena Starkey
2001 Fatal Occupational Injuries among Hispanic Construction Workers of Texas, 1997-1999. Human and Ecological Risk Assessment 7(7):1869-1883.

Fitzgerald, G. Kelley, Philip W. McClure, Paul Beattie, and Daniel L. Riddle
1994 Issues in Determining Treatment Effectiveness of Manual Therapy. Physical Therapy 74(3):227-233.

Foster, George
1987 On the Origin of Humoral Medicine in Latin America. Medical Anthropology Quarterly 1(4):355-393.

Gill, Virginia Teas
1998 Doing Attribution in Medical Interaction: Patients' Explanations for Illness and Doctors' Responses. Social Psychology Quarterly 61(4):342-360.

Graham, Robert, Andrew Ahn, Roger B. Davis, Bonnie O'Connor, David M. Eisenberg, and Russell Phillips
2005 Use of Complementary and Alternative Medical Therapies among Racial and Ethnic Minority Adults: Results from the 2002 National Health Interview Survey. Journal of the National Health Interview Survey 97(4):535-544.

Greenhalgh, Susan
2001 Under the Medical Gaze: Facts and Fictions of Chronic Pain. Berkeley: University of California Press.

Hawk, Cheryl, Cynthia R. Long, Robert Reiter, Charles S. Davis, Jerrilyn A. Cambron, and Roni Evans
2002 Issues in Planning a Placebo-Controlled Trial of Manual Methods: Results of a Pilot Study. The Journal of Alternative and Complementary Medicine 8(1):21-32.

Hemmila, Heikki M., Sirkka M. Keinanen-Kiukaanniemi, Sinikka Levoska, and Pekka Puska
2002 Long-Term Effectiveness of Bone-setting, Light Exercise Therapy, and Physiotherapy for Prolonged Back Pain: A Randomized Controlled Trial. Journal of Manipulative and Physiological Therapeutics 25(2):99-104.

Herr, Keela A., Kevin Spratt, Paula R. Mobily, and Giovanna Richardson
2004 Pain Intensity Assessment in Older Adults: Use of Experimental Pain to Compare Psychometric Properties and Usability of Selected Pain Scales with Younger Adults. Clinical Journal of Pain 20(4):207-219.

Higham, J. M., R. W. Shaw, H. D. Hadjistavropoulos, F. K. MacLeod, and G. J. G. Asmundson
1999 Validation of the Chronic Pain Coping Inventory. Pain 80(3):471-481.

Hinojosa, Servando Z.
2002 The Hands Know: Bodily Engagement and Medical Impasse in Highland Maya Bonesetting. Medical Anthropology Quarterly 16(1):22-40.

Hoving, Jan Lucas, Bart W. Koes, Henrica C. W. de Vet, Danielle A. W. M. van der Windt, Willem J. J. Assendelft, Henk van Mameren, Walter L. J. M. Deville, Jan J. M. Pool, Rob J. P. M. Scholten, and Lex M. Bouter
2002 Manual Therapy, Physical Therapy, or Continued Care by a General Practitioner for Patients with Neck Pain. Annals of Internal Medicine 136(10):713-722.

Hsieh, Lisa Li-Chen, Chung-Hung Kuo, Liang Huei Lee, Amy Ming-Fang Yen, Kuo-Liong Chien, and Tony Hsui-Hsi Chen
2006 Treatment of Low Back Pain by Accupressure and Physical Therapy: Randomised Controlled Trial. British Medical Journal 332(7543):696-700.

Hunter, Leslie Gene, and Cecilia Aros Hunter
1996 "Mother Lane" and the "New Mooners": An Expression of Curanderismo. Southwestern Historical Quarterly 99(3):290-325.

Jackson, Jean E.
1992 After a While No One Believes You: Real and Unreal Pain. *In* Pain and Human Experience: An Anthropological Perspective. Mary-Jo DelVecchio Good, Paul E. Brodwin, Byron J. Good, Arthur Kleinman, eds. Pp. 138-168. Berkeley: University of California Press.

Jette, Alan M., and Anthony Delitto
1997 Physical Therapy Treatment Choices for Musculoskeletal Impairments. Physical Therapy 77(2):145-154.

Jezewsky, Mary Ann, and Jane Poss
2002 Mexican Americans' Explanatory Model of Type 2 Diabetes. Western Journal of Nursing Research 24(8):840-858.

Jordan, Brigitte
1989 Cosmopolitical Obstetrics: Some Insights from the Training of Traditional Midwives. Social Science and Medicine 28(9):925-944.

Kay, Margarita, and Marianne Yoder
1987 Hot and Cold in Women's Ethnotherapeutics: The American-Mexican West. Social Science and Medicine 25(4):347-355.

Kirmayer, Laurence J.
1994 Improvisation and Authority in Illness Meaning. Culture, Medicine and Psychiatry 18(2):183-214.

Kleinman, Arthur
1980 Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine, and Psychiatry. Berkeley: University of California Press. .

Kleinman, Arthur, Leon Eisenberg, and Byron Good
1978 Culture, Illness, and Care: Critical Lessons from Anthropologic and Cross-Cultural Research. Annals of Internal Medicine 88(2):251-258

LaVeist, Thomas, and Amani Nuru-Jeter
2002 Is Doctor-Patient Race Concordance Associated with Greater Satisfaction with Care? Journal of Health and Social Behavior 43(3):296-306.

Lazarus, Ellen
1988 Theoretical Considerations for the Study of the Doctor-Patient Relationship: Implications of a Perinatal Study. Medical Anthropology Quarterly 2(1):34-58.

López-Austin, Alfredo
1988 The Human Body and Ideology: Concepts of the Ancient Nahuas. Thelma Ortiz de Montellano and Bernard Ortiz de Montellano, trans. Salt Lake City: University of Utah Press.

Luna, Elaine
2003 Nurse-Curanderas: Las Que Curan at the Heart of Hispanic Culture. Journal of Holistic Nursing 21(4):326-342.

McCormack, D., D. Evoy, D. Mulcahy, and M. Walsh
1997 An Evaluation of Patients Comprehension of Orthopaedic Terminology: Implications for Informed Consent. Journal of the Royal College of Surgeons of Edinburgh 42(1):33-35.

Mikhail, Blanche I.
1994 Hispanic Mothers' Beliefs and Practices Regarding Selected Children's Health Problems. Western Journal of Nursing Research 16(6):623-638.

Montejano, David
1987 Anglos and Mexicans in the Making of Texas, 1836-1986. Austin: University of Texas Press.

Mull, J. Dennis, and Dorothy S. Mull
1983 A Visit with a Curandero (Cross-cultural Medicine). Western Journal of Medicine 139(5):730-736.

Nall II, Frank, and Joseph Speilberg
1967 Social and Cultural Factors in the Responses of Mexican Americans to Medical Treatment. Journal of Health and Social Behavior 8:299-308.

National Institute for Occupational Safety and Health (NIOSH)
2004 Worker Health Chartbook 2004. URL< http://www2a.cdc.gov/niosh-Chartbook/ch5/ch5-4.asp> (April 22, 2005).

O'Neil, John D.
1989 The Cultural and Political Context of Patient Dissatisfaction in Cross-Cultural Treatment Encounters: A Canadian Inuit Study. Medical Anthropology Quarterly 3(4):325-344.

Onuminya, J. E., P. O. Obekpa, H. C. Ihezue, N. D. Ukegbu, and B. O. Onabowale
2000 Major Amputations in Nigeria: A Plea to Educate Traditional Bone Setters. Tropical Doctor 30(3):133-135.

Oths, Kathryn S.
1994 Communication in a Chiropractic Clinic: How a D. C. Treats His Patients. Culture, Medicine, and Psychiatry 18(1):83-113.

Oths, Kathryn S. and Servando Z. Hinojosa, eds.
2004 Healing by Hand: Manual Medicine and Bonesetting in Global Perspective. Walnut Creek, Calif.: AltaMira Press.

Padilla, Ricardo, Veronica Gómez, Stacy L. Biggerstaff, and Philip S. Mehler
2001 Use of Curanderismo in a Public Health Care System. Archives of Internal Medicine 161(10):1336-1340.

Peek, M. Kristen, Kenneth J. Ottenbacher, Kyriakos S. Markides, and Glenn V. Ostir
2003 Examining the Disablement Process among Older Mexican American Adults. Social Science and Medicine 57(3):413-425.

Pratt, S. G., and D. L. Hard
1998 Injury Risk Factors Associated with Agricultural Workplace Fatalities. Journal of Agricultural Safety and Health (Special Issue) 1:29-38.

Reid, Janice, Christine Ewan, and Eva Lowy
1991 Pilgrimage of Pain: The Illness Experiences of Women with Repetition Strain Injury and the Search for Credibility. Social Science and Medicine 32(5):601-612.

Resnik, Linda, and Ed Dobrykowski
2005 Outcomes Measurement for Patients with Low Back Pain. Orthopaedic Nursing 24(1):14-24.

Rizzo, J. A., T. A. Abbott III, and M. L. Berger
1998 Nonmedical Outcomes of Chronic Backache in the United States. Medical Care 36:1471-1488.

Roberts, C., A. O. Adebajo, and S. Long
2002 Improving the Quality of Care of Musculoskeletal Conditions in Primary Care. Rheumatology 41(5):503-508.

Scarry, Elaine
1985 The Body in Pain: The Making and Unmaking of the World. New York: Oxford University Press.

Smith, Marlaine C., Mary Ann Stallings, Suzanne Mariner, and Maggie Burrall
1999 Benefits of Massage Therapy for Hospitalized Patients: A Descriptive and Qualitative Evaluation. Alternative Therapies in Health and Medicine 5(4):64-71.

Strunin, Lee, and Leslie I. Boden
2004 Family Consequences of Chronic Back Pain. Social Science and Medicine 58(7):1385-1393.

Sullivan, Mark
1998 The Problem of Pain in the Clinicopathological Method. The Clinical Journal of Pain 14(3):197-201.

Texas State Data Center and Office of the State Demographer (TSDC)
2005a Table 1: Estimates of the Number and Percent of Uninsured by Age and Race/Ethnicity for Texas Department of Health Service Regions, 2005. URL:<http://txsdc.utsa.edu/#page_top> (September 14, 2007).
2005b Estimates of the Number and Percent of Uninsured by Age and Race/Ethnicity for Counties in Texas, 2005. URL:<http://txsdc.utsa.edu/#page_top> (September 14, 2007).

Thompson, Carol Lynn, and Linda M. Pledger
1993 Doctor-Patient Communication: Is Patient Knowledge of Medical Terminology Improving? Health Communication 5(2):89-97.

Tijerina, Andrés
1998 Tejano Empire: Life on the South Texas Ranchos. College Station: Texas A&M University Press.

Tijssen, Ingrid
1979 Traditional Bone Setting in Kwahu, Ghana. *In* In Search of Health: Essays in Medical Anthropology. Sjaak van der Geest and Klaas W. van der Veen, eds. Pp. 111-121. Amsterdam: CANSA Antropolisch-Sociologische Centrum, Universiteit van Amsterdam.

Trotter II, Robert T., and Juan Antonio Chavira
1981 Curanderismo: Mexican American Folk Healing. Athens: The University of Georgia Press.

Underwood, M. R.
2004 Community Management of Knee Pain in Older People: Is Knee Pain the New Back Pain? Rheumatology 43(1):2-3.

Urwin, Michelle, Deborah Symmons, Timothy Allison, Therese Brammah, Helen Busby, Morven Roxby, Alicia Simmons, and Gareth Williams
1998 Estimating the Burden of Musculoskeletal Disorders in the Community: The Comparative Prevalence of Symptoms at Different Anatomical Sites, and the Relation to Social Deprivation. Annals of the Rheumatic Diseases 57(11):649-655.

United States Census Bureau (USCB)
2005 Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for Texas, April 1, 2000 to July 1, 2004. URL<www.census.gov/popest/states/asrh/tables/SC-EST2004-03-48.xls> (September 26, 2005).

Weiner, Debra K., and Edzard Ernst
2004 Complementary and Alternative Approaches to the Treatment of Persistent Musculoskeletal Pain. Clinical Journal of Pain 20(4):244-255.

Weinrich, Sally P., and Martin C. Weinrich
1990 The Effect of Massage on Pain in Cancer Patients. Applied Nursing Research 3(4):140-145.

Weintraub, Michael I.
1992 Shiatsu, Swedish Muscle Massage, and Trigger Point Suppression in Spinal Pain Syndrome. American Journal of Pain Management 2(2):74-78.

Weller, Susan C., and Roberta D. Baer
2001 Intra- and Intercultural Variation in the Definition of Five Illnesses: AIDS, Diabetes, the Common Cold, Empacho, and Mal de Ojo. Cross-Cultural Research 35(2):201-226.

White, Cassandra
2005 Explaining a Complex Disease Process: Talking to Patients about Hansen's Disease (Leprosy) in Brazil. Medical Anthropology Quarterly 19(3):310-330.

Wilkinson, Dawn S., Pamela L. Knox, James E. Chatman, Terrance L. Johnson, Nilufer Barbour, Yvonne Myles, and Antonio Reel
2002 The Clinical Effectiveness of Healing Touch. The Journal of Alternative and Complementary Medicine 8(1):33-47.