

THE EFFECT OF *CURANDERISMO* ON CHRONIC NON-MALIGNANT PAIN: A CASE REPORT

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This case study describes the effects of the use of *curanderismo*, an indigenous healing modality combining techniques in massage, sound, and aromatherapy, on a patient with chronic pain. Despite being a commonly used health practice in certain populations, little is reported in the medical literature about the use of *curanderismo*. Case report as part of a larger randomized trial of *curanderismo* for chronic pain. Setting was a community-based hospital affiliated primary care clinic. An adult patient with chronic, opioid dependent back pain following an injury, and subsequent spinal fusion was treated. Intervention was the patient received 33 *curanderismo* treatment sessions over 10 months in addition to ongoing conventional treatment at a community-based chronic pain management clinic. Main outcomes measures were self-reported assessments of pain, functional ability, mood, insomnia, and narcotic usage.

Secondary outcome measure was qualitative interview. Although there was no change in quantitative self-reported pain measures, the patient reported improved function, mood, and sleep as well as decreased narcotic usage. *Curanderismo*, in addition to conventional pain management, improved patient reported symptoms and functional ability, led to healthy lifestyle changes, and decreased narcotic usage. Controlled studies are needed to confirm the benefit of *curanderismo* as safe, non-interventional, and cost-effective adjunct for chronic pain management.

Key words: *curanderismo*, indigenous medicine, complementary medicine, chronic pain

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CASE REPORT

Background

Chronic pain is a significant public health problem in the United States, affecting an estimated 100 million Americans.¹ While acute pain serves to warn injury and prevent reinjury, chronic pain is maladaptive, no longer serving a useful signal function, and can become a disease in and of itself. Chronic pain involves an interplay of genetic, environmental, cultural, social, physiological, and biologic factors; diverse population groups have different experiences of pain.

A recent systematic review² found that there is insufficient evidence to determine the effectiveness of chronic narcotic use to improve pain or function. Meanwhile, concerns of abuse and diversion are rising even as evidence supporting a risk for serious harm builds. Although research now suggests opioids may not benefit these patients, in a 2012 study.³ Overall, 37% of patients with chronic low back pain were prescribed opioids, contributing to an average annual total medication cost of \$1572 (median cost: \$323) for these patients. Another study⁴ found that opioids tend to reduce chronic pain by only about 32%, even while a typical pain regimen may cost \$4600 per year.

In its 2011 report, "Relieving Pain in America," The Institute of Medicine recognized the importance of interdisciplinary approaches and comprehensive treatments that value the role of the patient and his or her community.¹ Indeed, when faced with treatments that are only moderately effective and have high cost, some patients may be more likely to turn to folk healers, even when they believe that a physician is best suited to treat serious health problems. Smith et al.^{5,6} found that Hispanic patients are more willing to use *curanderismo* than other patients who do not share that cultural background. In this context, culturally rooted interventions such as *curanderismo* could be a valuable addition to the treatment of pain, especially in Hispanic patients.

Curanderismo is a holistic healing tradition that is indigenous to Latin America and is used by Hispanics from Latin

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America who have emigrated to the United States. Non-Latin American Hispanic populations have different indigenous healing practices; this report focuses on the use of *curanderismo* in particular. *Curanderismo* practitioners, known as *curanderos* or *curanderas*, are folk healers who believe they have been given the gift of healing⁷ to promote both physical and spiritual health in their patients. As described by Trotter and Chavira,⁸ *curanderismo* can be classified as “material,” “spiritual,” or “mental.” Material practitioners rely on objects and ritual for healing. Spiritual healers believe illness is caused by spiritual imbalance and act as mediums for healing. Mental providers use mental energy to determine and correct a patient’s physical ailments. Modalities vary among practitioners, but include incense to establish a sacred space for healing (with ritual being an important part of *curanderismo* practice), the uses of scents (“aromatherapy” in Western complementary medicine) and essential oils, and sound therapy. The practice of *raspada* uses repeated stroking of the body’s meridian lines to restore the balance of energy, similar to acupressure or reiki. Herbal therapies are also widely used. Medical research on the effectiveness of alternative therapies has steadily grown: aromatherapy is used to ameliorate symptoms in conditions from menstrual cramps⁹ to post-operative nausea¹⁰; whole-body vibration has been shown to help improve postural stability in patients with fibromyalgia¹¹; acupuncture is in widespread use for pain relief in both chronic¹²; and acute illnesses¹³; and reiki can help relieve pain in dialysis patients.¹⁴ But despite the growing acceptance of and interest in complementary and alternative therapies, little is known about the effects of *curanderismo*.

This lack of evidence is problematic because *curanderismo* remains a common source of complementary healthcare among Hispanic populations in the United States.¹⁵ A 2001 study at the Denver Health Medical Center found that of 405 Hispanic patients and staff members surveyed in an outpatient primary care clinic, 91% knew what a *curandero* was and 29% had visited a *curandero*, 40% of those within the past year.¹⁵ Similar results were found in a 2008 study,¹⁶ in which 22% of respondents had used a folk remedy in the previous 12 months. A 2013 systematic review revealed that Hispanic patients may seek out a *curandero* for his or her Spanish literacy, affordability, spiritual counsel, or cultural connection.¹⁷ *Curanderismo* tends to be affordable because *curanderos* traditionally do not bill their clients,¹⁸ but work for donations or an exchange of goods or services. In the Denver metro area, practitioners charge between \$55 and \$250 per hour depending on the service offered; some also partner with trainees in holistic health modalities such as massage and acupuncture to offer low-cost treatments (\$5–\$25 donation requested) to low-income seniors in the area.¹⁹

While the prevalence of *curanderismo* may simply reflect nationwide increases in the use of complementary and alternative medical treatments,²⁰ recent studies have identified important differences in the way that Hispanics access and employ alternative care. While some patients may choose to seek care only from a *curandero*, therefore truly practicing “alternative” medicine, Applewhite found

that most elderly Mexican-American patients in a small study used *curanderismo* as “complementary” medicine, in addition to, rather than in place of, seeing a physician.⁵ A 2006 study of primary care patients in New Mexico showed that while Hispanics and non-Hispanics are equally likely to seek alternative treatments for chronic illnesses, they do so in different ways, whereas non-Hispanics are more likely to take dietary supplements, Hispanic patients tend to rely on copper jewelry, herbs, or traditional folk remedies such as *curanderismo*.²⁰ Additionally, Hispanic patients are less likely than non-Hispanic whites to disclose their participation in alternative treatments to their primary care doctors.²¹

Complementary and alternative medicine has some evidence to support its efficacy in chronic pain. A meta-analysis of the effect of acupuncture on chronic low back pain indicated that acupuncture does decrease pain more than sham acupuncture.²² Massage therapy has also been found to decrease pain levels more than placebo.²³ Since *curanderismo* has commonalities with both these practices, we postulated it could improve symptoms in patients undergoing conventional treatment for chronic pain.

Additionally, the individual modalities used in *curanderismo* are low-risk. The use of scents and oils has occasionally been associated with phototoxicity (most often associated with citrus oils) and skin irritation.²⁴ Sound therapy at the level of exposure used in *curanderismo* (similar to conversational volume) has no documented risks. The risks associated with *raspada* have not been studied, but since the technique involves the use of gentle, repetitive strokes parallel to the spine, its risks were assumed to be similar to massage, namely redness of the skin, soreness, bruising, and headaches.²⁵ Harms due to the use of *curanderismo* have been documented,^{26,27} but are mostly due to the use of herbs, which was not a part of this study. Because the treatments administered by *curanderas* were felt to be essentially harmless, the risk/benefit ratio for use in chronic pain was felt to be negligible, even if the benefits were modest.

History and Examination

The patient, a 53-year-old Hispanic male, with chronic low back pain, was recruited from the pain clinic at a community health center affiliated with Denver Health, the safety net hospital, as a part of a larger observational study for which IRB approval had been received. He had been on twice-daily oxycodone/acetaminophen following a back injury in 2007 and subsequent lumbar-sacral fusion operation in 2009. His past medical history was pertinent for a nerve sheath spinal tumor in his lumbar spine that was removed in 2003, hypertension, hepatitis C, substance abuse (cocaine and alcohol), anxiety, insomnia, obesity, and diverticulitis. At the first study visit, he was taking lisinopril/hydrochlorothiazide, zolpidem, clonazepam, diclofenac 75 mg twice daily, and oxycodone/acetaminophen 5 mg/325 mg twice daily. His exam at this time was notable for a pulse of 75, a blood pressure of 141/96, a weight of 230 pounds, and a height of 5’10”; he was in no distress. Exam was unremarkable except for paraspinal muscle tenderness along the entire spine and in the area over the sacroiliac joints. Special tests

included a negative McMurray; though the straight leg raise was positive bilaterally. He had normal strength and sensation.

Treatment

Curanderismo treatments were offered in a semi-private room at La Casa Clinic on designated pain clinic days and lasted approximately 40 min per patient. Before each treatment, patients were asked to document pain level, medication use, and psychological effects. Prior to the first treatment, the *curandera* spent time educating the patient about the connection between mind, body, and spirit, that is, vital to *curanderismo*. Each treatment began with a *plática* (heart to heart conversation or check in) with the *curandera*. The patient lay prone on a massage table to receive treatment, including inhaled and topically applied aromatherapy oils; sound therapy including the use of recorded music, chanting, and various instruments; and *raspada*, a practice wherein the back is repeatedly rubbed along the body's meridian lines to align and correct spiritual energy. Throughout the treatment, a sacred space was created through the use of fragrance, chanting, and spiritual intention, and mental energy was used to heal. The session concluded with a 5-min period of quiet reflection, which was designed to serve as a time of assimilation for the intense emotional and spiritual upheaval that can occur during these treatment sessions. He received a total of 33 *curanderismo* treatments over a length of 10 months and completed surveys measuring outcomes including self-reported pain assessment, functional ability, mood, and insomnia.

OUTCOMES

Quantitative Outcomes

Though the patient reported no quantitative decrease in his maximum and average pain levels (Figure 1), he did describe a reduced need for opioid pain medication, including three months during which he did not refill his Percocet prescription.

Qualitative Outcomes

The patient highlighted the effectiveness of relaxation coaching in reducing perceived pain; the days-long duration of

perceived benefits of *raspada* treatments versus hours-long relief provided by opioids, and a distaste for side effects of the latter; an improved mental outlook despite persistent pain; and the desire to undergo treatments more frequently with the goal of discontinuing opioid pain medications entirely. At a clinic visit just prior to our interview, both the patient and his primary care provider had noted a decrease in his blood pressure, likely a result of changes in diet and exercise independent of the study; he reported an intentional weight loss of nearly 100 pounds over the year encompassing his treatments. Interestingly, although he repeatedly endorsed the psychological and spiritual/emotional benefits of the relaxation techniques and coping strategies suggested by the *curanderas*, the patient was strongly opposed to participating in mental health counseling outside the study treatments.

When asked to identify possible reasons that the treatments were successful, the patient noted that his athletic lifestyle prior to his injury motivated him to participate in physical activity as an adjunct to his pain medication. He also noted his desire to “fix” the underlying source of the pain, rather than just “covering it up” with a pill. When prompted, he shared initial concern that the *curanderismo* treatments were associated with “voodoo” or “black magic.” A frank conversation with the *curanderas* put his mind at ease; now he has visions of the *curanderas* “praying over me, bringing in the saints” during his treatments, which he described as “going into a trance” and “just mellowing out.” When asked about his prior experience with *curanderismo*, the patient recounted childhood memories of a “grandma-doctor,” a very old female relative who could cure common ailments with homeopathic remedies.

Lastly, when questioned about access to complementary and alternative therapies both during the initial course of treatment for his back injury and during the post-operative period, the patient stated that he was never educated about the benefits of massage or physical therapy, nor connected with any resources for the same. “I thought they just forgot about me,” he said of his post-operative care providers. Realizing that massage and exercise helped alleviate his pain, he sought these opportunities elsewhere—“that’s why I joined the gym.” At the close of the interview, the patient reiterated his belief in the benefit of the *curanderismo* treatments: “if you let your mind go and just be open to it, it works.”

DISCUSSION

This case study is an important step in affirming the utility of complementary and alternative medicine in mainstream primary care. As in the case of this patient, the combination of *curanderismo* treatments with self-awareness and relaxation techniques helped emphasize a more holistic approach to wellness, and empowered him to become an active participant in his own healthcare. The focus within *curanderismo* (whether practiced on the spiritual or, as in this study, on the mental level as described by Trotter and Chavira) on these mindfulness techniques may be especially important in Hispanic males, as they are unlikely to seek mental health counseling due to cultural norms.²⁸ This reluctance is reflected in this patient’s rejection of mental healthcare even after admitting

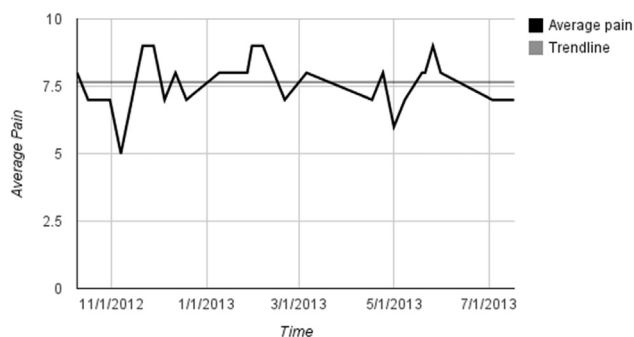


Figure 1. Average pain over time.

that the benefits of *curanderismo* in his case seem to be largely psychological. Because this result may not be generalizable due to the limited data and participation, more studies are needed to fully determine the value of low-cost, non-invasive modalities such *curanderismo* as an adjunct for patients with chronic pain.

LIMITATIONS

The description of a single case of benefit from *curanderismo* treatments on improving management of chronic pain is not widely generalizable. Large studies are needed to describe feasibility and outcomes on larger numbers of patients, specifically randomized, controlled trials that would be helpful to tease out which effects of *curanderismo* interventions are due to treatments themselves versus which may be explained by placebo response or natural history.

CONCLUSION

Curanderismo, a low-cost and low-risk indigenous healing method, may offer benefit to patients with chronic pain.

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