



Be Wary of Acupuncture, Qigong, and "Chinese Medicine"

Stephen Barrett, M.D.

"Chinese medicine," often called "Oriental medicine" or "traditional Chinese medicine (TCM)," encompasses a vast array of folk medical practices based on mysticism. It holds that the body's vital energy (*chi* or *qi*) circulates through channels, called *meridians*, that have branches connected to bodily organs and functions. Illness is attributed to imbalance or interruption of *chi*. Ancient practices such as acupuncture, Qigong, and the use of various herbs are claimed to restore balance.

Traditional acupuncture, as now practiced, involves the insertion of stainless steel needles into various body areas. A low-frequency current may be applied to the needles to produce greater stimulation. Other procedures used separately or together with acupuncture include: moxibustion (burning of floss or herbs applied to the skin); injection of sterile water, procaine, morphine, vitamins, or homeopathic solutions through the inserted needles; applications of laser beams (laserpuncture); placement of needles in the external ear (auriculotherapy); and acupressure (use of manual pressure). Treatment is applied to "acupuncture points," which are said to be located throughout the body. Originally there were 365 such points, corresponding to the days of the year, but the number identified by proponents during the past 2,000 years has increased gradually to about 2,000 [1]. Some practitioners place needles at or near the site of disease, whereas others select points on the basis of symptoms. In traditional acupuncture, a combination of points is usually used.

Qigong is also claimed to influence the flow of "vital energy." Internal Qigong involves deep breathing, concentration, and relaxation techniques used by individuals for themselves. External Qigong is performed by "Qigong masters" who claim to cure a wide variety of diseases with energy released from their fingertips. However, scientific investigators of Qigong masters in China have found no evidence of paranormal powers and some evidence of deception. They found, for example, that a patient lying on a table about eight feet from a Qigong master moved rhythmically or thrashed about as the master moved his hands. But when she was placed so that she could no longer see him, her movements were unrelated to his [2]. [Falun gong](#), which China banned several years ago, is a Qigong variant claimed to be "a powerful mechanism for healing, stress relief and health improvements."

Most acupuncturists espouse the traditional Chinese view of health and disease and consider acupuncture, herbal medicine, and related practices to be valid approaches to the full gamut of disease. Others reject the traditional approach and merely claim that acupuncture offers a simple way to achieve pain relief. The diagnostic process used by TCM practitioners may include questioning (medical history, lifestyle), observations (skin, tongue, color), listening (breathing sounds), and pulse-taking. Six pulse aspects said to correlate with body organs or functions are checked on each wrist to determine which meridians are "deficient" in *chi*. (Medical science recognizes only one pulse, corresponding to the heartbeat, which can be felt in the wrist, neck, feet, and various other places.) Some acupuncturists state that the electrical properties of the body may become imbalanced weeks or even months before symptoms occur. These practitioners claim that acupuncture can be used to treat conditions when the patient just "doesn't feel right," even though no disease is apparent.

TCM (as well as the folk medical practices of various other Asian countries) is a threat to certain animal species. For example, black bears—valued for their gall bladders—have been hunted nearly to extinction in Asia, and poaching of black bears is a serious problem in North America.

Dubious Claims

The conditions claimed to respond to acupuncture include chronic pain (neck and back pain, migraine headaches), acute injury-related pain (sprains, muscle and ligament tears), gastrointestinal problems (indigestion, ulcers, constipation, diarrhea), cardiovascular conditions (high and low blood pressure), genitourinary problems (menstrual irregularity, frigidity, impotence), muscle and nerve conditions (paralysis, deafness), and behavioral problems (overeating, drug dependence, smoking). However, the evidence supporting these claims consists mostly of practitioners' observations and poorly designed studies. A controlled

study found that electroacupuncture of the ear was no more effective than placebo stimulation (light touching) against chronic pain [3]. In 1990, three Dutch epidemiologists analyzed 51 controlled studies of acupuncture for chronic pain and concluded that "the quality of even the better studies proved to be mediocre. . . . The efficacy of acupuncture in the treatment of chronic pain remains doubtful." [4] They also examined reports of acupuncture used to treat addictions to cigarettes, heroin, and alcohol, and concluded that claims that acupuncture is effective as a therapy for these conditions are not supported by sound clinical research [5].

Acupuncture anesthesia is not used for surgery in the Orient to the extent that its proponents suggest. In China physicians screen out patients who appear to be unsuitable. Acupuncture is not used for emergency surgery and often is accompanied by local anesthesia or narcotic medication [6].

How acupuncture may relieve pain is unclear. One theory suggests that pain impulses are blocked from reaching the spinal cord or brain at various "gates" to these areas. Another theory suggests that acupuncture stimulates the body to produce narcotic-like substances called *endorphins*, which reduce pain. Other theories suggest that the placebo effect, external suggestion (hypnosis), and cultural conditioning are important factors. Melzack and Wall note that pain relief produced by acupuncture can also be produced by many other types of sensory hyperstimulation, such as electricity and heat at acupuncture points and elsewhere in the body. They conclude that "the effectiveness of all of these forms of stimulation indicates that acupuncture is not a magical procedure but only one of many ways to produce analgesia [pain relief] by an intense sensory input." In 1981, the American Medical Association Council on Scientific Affairs noted that pain relief does not occur consistently or reproducibly in most people and does not operate at all in some people [7].

In 1995, George A. Ulett, M.D., Ph.D., Clinical Professor of Psychiatry, University of Missouri School of Medicine, stated that "devoid of metaphysical thinking, acupuncture becomes a rather simple technique that can be useful as a nondrug method of pain control." He believes that the traditional Chinese variety is primarily a placebo treatment, but electrical stimulation of about 80 acupuncture points has been proven useful for pain control [8].

The quality of TCM research in China has been extremely poor. A 1999 analysis of 2,938 reports of clinical trials reported in Chinese medical journals concluded that that no conclusions could be drawn from the vast majority of them. The researchers stated:

In most of the trials, disease was defined and diagnosed according to conventional medicine; trial outcomes were assessed with objective or subjective (or both) methods of conventional medicine, often complemented by traditional Chinese methods. Over 90% of the trials in non-specialist journals evaluated herbal treatments that were mostly proprietary Chinese medicines. . . .

Although methodological quality has been improving over the years, many problems remain. The method of randomisation was often inappropriately described. Blinding was used in only 15% of trials. Only a few studies had sample sizes of 300 subjects or more. Many trials used as a control another Chinese medicine treatment whose effectiveness had often not been evaluated by randomised controlled trials. Most trials focused on short term or intermediate rather than long term outcomes. Most trials did not report data on compliance and completeness of follow up. Effectiveness was rarely quantitatively expressed and reported. Intention to treat analysis was never mentioned. Over half did not report data on baseline characteristics or on side effects. Many trials were published as short reports. Most trials claimed that the tested treatments were effective, indicating that publication bias may be common; a funnel plot of the 49 trials of acupuncture in the treatment of stroke confirmed selective publication of positive trials in the area, suggesting that acupuncture may not be more effective than the control treatments. [9]

Two scientists at the University of Heidelberg have developed a "fake needle" that may enable acupuncture researchers to perform better-designed controlled studies. The device is a needle with a blunt tip that moves freely within a copper handle. When the tip touches the skin, the patient feels a sensation similar to that of an acupuncture needle. At the same time, the visible part of the needle moves inside the handle so it appears to shorten as though penetrating the skin. When the device was tested on volunteers, none suspected that it had not penetrated the skin [10].

In 2004, a University of Heidelberg team proved the worth of their "sham acupuncture" technique in a study of postoperative nausea and vomiting (PONV) in women who underwent breast or gynecologic surgery. The study involved 220 women who received either acupuncture or the sham procedure at the acupuncture point "Pericardium 6" on the inside of the forearm. No significant difference in PONV or antiemetic medication use was found between the two groups or between the people who received treatment before anesthesia was induced and those who received it while anesthetized [11]. A subgroup analysis found that vomiting was "significantly reduced" among the acupuncture patients, but the authors correctly noted that this finding might be due to studying multiple outcomes. (As the number of different outcome measures increases, so do the odds that a "statistically significant" finding will be spurious.) This study is important because PONV reduction is one of the few alleged benefits of acupuncture supported by reports in scientific journals. However, the other positive studies were not as tightly controlled.

Harriet Hall, a retired family practitioner who is interested in quackery, has summed up the significance of acupuncture research in an interesting way:

Acupuncture studies have shown that it makes no difference where you put the needles. Or whether you use needles or just pretend to use needles (as long as the subject believes you used them). Many acupuncture researchers are doing what I call Tooth Fairy science: measuring how much money is left under the pillow without bothering to ask if the Tooth Fairy is real.

Risks Exist

Improperly performed acupuncture can cause fainting, local hematoma (due to bleeding from a punctured blood vessel), pneumothorax (punctured lung), convulsions, local infections, hepatitis B (from unsterile needles), bacterial endocarditis, contact dermatitis, and nerve damage. The herbs used by acupuncture practitioners are not regulated for safety, potency, or effectiveness. There is also risk that an acupuncturist whose approach to diagnosis is not based on scientific concepts will fail to diagnose a dangerous condition.

The adverse effects of acupuncture are probably related to the nature of the practitioner's training. A survey of 1,135 Norwegian physicians revealed 66 cases of infection, 25 cases of punctured lung, 31 cases of increased pain, and 80 other cases with complications. A parallel survey of 197 acupuncturists, who are more apt to see immediate complications, yielded 132 cases of fainting, 26 cases of increased pain, 8 cases of pneumothorax, and 45 other adverse results [12]. However, a 5-year study involving 76 acupuncturists at a Japanese medical facility tabulated only 64 adverse event reports (including 16 forgotten needles and 13 cases of transient low blood pressure) associated with 55,591 acupuncture treatments. No serious complications were reported. The researchers concluded that serious adverse reactions are uncommon among acupuncturists who are medically trained [13].

In 2001, members of the British Acupuncture Council who participated in two prospective studies reported low complication rates and no serious complications among patients who underwent a total of more than 66,000 treatments [14,15]. An accompany editorial suggested that in competent hands, the likelihood of complications is small [16]. Since outcome data are not available, the studies cannot compare the balance of risks vs benefit. Nor do the studies take into account the likelihood of misdiagnosis (and failure to seek appropriate medical care) by practitioners who use traditional Chinese methods.

There is also financial risk. Online information suggests that the cost per visit ranges from about \$50 to \$100 per treatment, with the first visit to a practitioner costing more. Herbal products, which many practitioners commonly prescribe, could range anywhere from a few dollars to a few hundred dollars per month.

Questionable Standards

In 1971, an acupuncture boom occurred in the United States because of stories about visits to China by various American dignitaries. Entrepreneurs, both medical and nonmedical, began using flamboyant advertising techniques to promote clinics, seminars, demonstrations, books, correspondence courses, and do-it-yourself kits. Today some states restrict the practice of acupuncture to physicians or others operating under their direct supervision. In about 20 states, people who lack medical training can perform acupuncture without medical supervision. The FDA now classifies acupuncture needles as Class II medical devices and requires labeling for one-time use by practitioners who are legally authorized to use them [17]. Acupuncture is not covered under Medicare. The March 1998 issue of the *Journal of the American Chiropractic Association* carried a five-part cover story encouraging chiropractors to get acupuncture training, which, according to one contributor, would enable them to broaden the scope of their practice [18].

The [National Certification Commission for Acupuncture and Oriental Medicine \(NCCAOM\)](#) has set voluntary [certification standards](#) and offers separate certifications on Oriental medicine, acupuncture, Chinese herbology, and Asian bodywork therapy. In 2007, it reported that its certification programs or exams were be recognized for licensure in 40 states and the District of Columbia and that more than 20,000 practitioners are licensed in the United States [19]. ([The Acupuncture.com Web site provides information on the licensing status of each state.](#)) The credentials used by acupuncturists include C.A. (certified acupuncturist), Lic. Ac. (licensed acupuncturist), M.A. (master acupuncturist), Dip. Ac. (diplomate of acupuncture), Dipl.O.M. (diplomate of Oriental medicine), and O.M.D. (doctor of Oriental medicine). Some of these have legal significance, but they do not signify that the holder is competent to make adequate diagnoses or render appropriate treatment.

In 1990, the U.S. Secretary of Education recognized what is now called the [Accreditation Commission for Acupuncture and Oriental Medicine \(ACAOM\)](#) as an accrediting agency. However, such recognition is not based on the scientific validity of what is taught but upon other criteria [20]. Ulett has noted:

Certification of acupuncturists is a sham. While a few of those so accredited are naive physicians, most are nonmedical persons who only play at being doctor and use this certification as an umbrella for a host of unproven New Age hokum treatments. Unfortunately, a few HMOs, hospitals, and even medical schools are succumbing to the bait and exposing patients to such bogus treatments when they need real medical care.

The [National Council Against Health Fraud](#) has concluded:

- Acupuncture is an unproven modality of treatment.
- Its theory and practice are based on primitive and fanciful concepts of health and disease that bear no relationship to present scientific knowledge
- Research during the past 20 years has not demonstrated that acupuncture is effective against any disease.
- Perceived effects of acupuncture are probably due to a combination of expectation, suggestion, counter-irritation, conditioning, and other psychologic mechanisms.
- The use of acupuncture should be restricted to appropriate research settings,
- Insurance companies should not be required by law to cover acupuncture treatment,
- Licensure of lay acupuncturists should be phased out.
- Consumers who wish to try acupuncture should discuss their situation with a knowledgeable physician who has no commercial interest [21].

The NIH Debacle

In 1997, a Consensus Development Conference sponsored by the National Institutes of Health and several other agencies concluded that "there is sufficient evidence . . . of acupuncture's value to expand its use into conventional medicine and to encourage further studies of its physiology and clinical value." [22] The panelists also suggested that the federal government and insurance companies expand coverage of acupuncture so more people can have access to it. These conclusions were not based on research done after NCAHF's position paper was published. Rather, they reflected the bias of the panelists who were selected by a planning committee dominated by acupuncture proponents [23]. NCAHF board chairman Wallace Sampson, M.D., has described the conference "a consensus of proponents, not a consensus of valid scientific opinion."

Although the report described some serious problems, it failed to place them into proper perspective. The panel acknowledged that "the vast majority of papers studying acupuncture consist of case reports, case series, or intervention studies with designs inadequate to assess efficacy" and that "relatively few" high-quality controlled trials have been published about acupuncture's effects. But it reported that "the World Health Organization has listed more than 40 [conditions] for which [acupuncture] may be indicated." This sentence should have been followed by a statement that the list was not valid.

Far more serious, although the consensus report touched on Chinese acupuncture theory, it failed to point out the danger and economic waste involved in going to practitioners who can't make appropriate diagnoses. The report noted:

- The general theory of acupuncture is based on the premise that there are patterns of energy flow (Qi) through the body that are essential for health. Disruptions of this flow are believed to be responsible for disease. The acupuncturist can correct imbalances of flow at identifiable points close to the skin.
- Acupuncture focuses on a holistic, energy-based approach to the patient rather than a disease-oriented diagnostic and treatment model.
- Despite considerable efforts to understand the anatomy and physiology of the "acupuncture points," the definition and characterization of these points remains controversial. Even more elusive is the scientific basis of some of the key traditional Eastern medical concepts such as the circulation of Qi, the meridian system, and the five phases theory, which are difficult to reconcile with contemporary biomedical information but continue to play an important role in the evaluation of patients and the formulation of treatment in acupuncture.

Simply stated, this means that if you go to a practitioner who practices traditional Chinese medicine, you are unlikely to be properly diagnosed. Very few publications have mentioned this, which strikes me as very strange. Even *Consumer Reports* magazine has advised readers who want acupuncture treatment to consult a practitioner who is NCCAOM-certified. I advise people to avoid "certified" practitioners. Because the training needed for certification is based on nonsensical TCM theories, the safest way to obtain acupuncture is from a medical doctor who does research at a university-based medical school and does not espouse such theories.

Diagnostic Variability

In 1998, following a lecture I attended at a local college, an experienced TCM practitioner diagnosed me by taking my pulse and looking at my tongue. He stated that my pulse showed signs of "stress" and that my tongue indicated I was suffering from "congestion of the blood." A few minutes later, he told a woman that her pulse showed premature ventricular contractions (a disturbance of the heart's rhythm that could be harmless or significant, depending on whether the individual has underlying heart disease). He suggested that both of us undergo treatment with acupuncture and herbs—which would have cost about \$90 per visit. I took the woman's pulse and found that it was completely normal. I believe that the majority of nonmedical acupuncturists rely on improper diagnostic procedures. The NIH consensus panel should have emphasized the seriousness of this problem.

Subsequent research has confirmed that TCM diagnosis has very little to do with people's real health problems. At least six studies have found that when multiple practitioners see the same patient, their TCM diagnoses vary considerably.

In a study published in 2001, a 40-year-old woman with chronic back pain who visited seven acupuncturists during a 2-week period was diagnosed with "Qi stagnation" by 6 of them, "blood stagnation" by 5, "kidney Qi deficiency" by 2, "yin deficiency" by 1, and "liver Qi deficiency" by 1. The proposed treatments varied even more. Among the six who recorded their recommendations, the practitioners planned to use between 7 and 26 needles inserted into 4 to 16 specific "acupuncture points" in the back, leg, hand, and foot. Of 28 acupuncture points selected, only 4 (14%) were prescribed by two or more acupuncturists. [24]. The study appears to have been designed to make the results as consistent as possible. All of the acupuncturists had been trained at a school of traditional Chinese medicine (TCM). Six other volunteers were excluded because they "used highly atypical practices," and three were excluded because they had been in practice for less than three years. The study's authors stated that the diagnostic findings showed "considerable consistency" because nearly all of the practitioners found Qi or blood stagnation. However, the most likely explanation was that these are diagnosed in nearly everyone.

In another study, six TCM acupuncturists evaluated the same six patients on the same day. Twenty diagnoses and 65 acupoints were used at least once. The diagnosis of "Qi/Blood Stagnation with Kidney Deficiency" and the acupoint UB23 were used for every patient by most acupuncturists. However, consistency across acupuncturists regarding diagnostic details and other acupoints was poor. No diagnoses, and only one acupoint, were used preferentially for a subgroup of patients. Some diagnoses and treatment recommendations were dependent more on the practitioner than on the patient. Fine-grained diagnoses and most acupoints were unrelated to either patient or practitioner. The researchers concluded that TCM diagnoses and treatment recommendations for specific patients with chronic low back pain vary widely from one practitioner to another [25].

Another study examined TCM diagnoses and treatments for patients with chronic low-back pain using two separate sets of treatment records. Information from more than 150 initial visits was available for analysis. A diagnosis of "Qi and Blood Stagnation" or "Qi Stagnation" was made for 85% of patients. A diagnosis of kidney deficiency (or one of its three subtypes) was made for 33%-51% of patients. Other specific diagnoses were made for less than 20% of the patients. An average of 12-13 needles was used in each treatment. Although more than 85 different acupoints were used in each data set, only 5 or 6 acupoints were used in more than 20 of the treatments in each data set. Only two of those acupoints (UB23, UB40) were the same for both sources of data. More than half of the patients received adjunctive treatments, including heat (36%-67%), and cupping (16%-21%). There was substantial variability in treatments among providers [26].

In a larger study published in 2004, three TCM practitioners examined the same 39 rheumatoid arthritis (RA) patients separately at the University of Maryland General Clinical Research Center. Each patient filled out a questionnaire and underwent a physical examination that included tongue and pulse diagnosis. Then each practitioner provided both a TCM diagnosis and a herbal prescription. Agreement on TCM diagnoses among the 3 pairs of TCM practitioners ranged from 25.6% to 33.3%. The degree to which the herbal prescriptions agreed with textbook recommended practice of each TCM diagnosis ranged from 87.2% to 100%. The study's authors concluded:

The total agreement on TCM diagnosis on RA patients among 3 TCM practitioners was low. When less stringent, but theoretically justifiable, criteria were employed, greater consensus was obtained. . . . The correspondence between the TCM diagnosis and the herbal formula prescribed for that diagnosis was high, although there was little agreement among the 3 practitioners with respect to the herbal formulas prescribed for individual patients [27].

The University of Maryland researchers then repeated the above study using 40 RA patients and three practitioners who had had at least five years of experience. The results were nearly identical to the previous findings [28].

In another study, 37 participants with frequent headaches were independently evaluated by three licensed acupuncturists said to be highly trained in TCM. The acupuncturists identified the meridians and type of dysfunction they believed were contributing to the participants' symptoms. The acupuncturists also ascribed one or more TCM diagnoses to each participant and selected eight acupuncture points for needling. Some variation in TCM pattern diagnosis and point selection was observed for all subjects. "Liver Yang" and "Qi dysfunction" were diagnosed in more than two thirds of subjects. Acupuncture points Liver 3, Large Intestine 4, and Governing Vessel (DU) 20 were the most commonly selected points for treatment [29].

It would be fascinating to see what would happen if a healthy person who needed no medical treatment was examined by multiple acupuncturists.

The Bottom Line

TCM theory and practice are not based upon the body of knowledge related to health, disease, and health care that has been widely accepted by the scientific community. TCM practitioners disagree among themselves about how to diagnose patients and which treatments should go with which diagnoses. Even if they could agree, the TCM theories are so nebulous that no amount of scientific study will enable TCM to offer rational care.

For Additional Information

- [CSICOP Investigation of TCM and Pseudoscience in China](#)

- [NCAHF Position Paper on Acupuncture](#)
- [Questioning Dr. Isadore Rosenfeld's Acupuncture Story](#)
- [Why TCM Diagnosis is Worthless](#)

References

1. Skrabanek P. Acupuncture: Past, present, and future. In Stalker D, Glymour C, editors. Examining Holistic Medicine. Amherst, NY: Prometheus Books, 1985.
2. Kurtz P, Alcock J, and others. [Testing psi claims in China: Visit by a CSICOP delegation](#). Skeptical Inquirer 12:364-375, 1988.
3. Melzack R, Katz J. [Auriculotherapy fails to relieve chronic pain: A controlled crossover study](#). JAMA 251:1041-1043, 1984.
4. Ter Reit G, Kleijnen J, Knipschild P. [Acupuncture and chronic pain: A criteria-based meta-analysis](#). Clinical Epidemiology 43:1191-1199, 1990.
5. Ter Riet G, Kleijnen J, Knipschild P. [A meta-analysis of studies into the effect of acupuncture on addiction](#). British Journal of General Practice 40:379-382, 1990.
6. Beyerstein BL, Sampson W. [Traditional Medicine and Pseudoscience in China: A Report of the Second CSICOP Delegation \(Part 1\)](#). Skeptical Inquirer 20(4):18-26, 1996.
7. American Medical Association Council on Scientific Affairs. Reports of the Council on Scientific Affairs of the American Medical Association, 1981. Chicago, 1982, The Association.
8. Ulett GA. Acupuncture update 1984. Southern Medical Journal 78:233-234, 1985.
9. Tang J-L, Zhan S-Y, Ernst E. [Review of randomised controlled trials of traditional Chinese medicine](#). British Medical Journal 319:160-161, 1999.
10. Streitberger K, Kleinhenz J. [Introducing a placebo needle into acupuncture research](#). Lancet 352:364-365, 1998.
11. Streitberger K and others. [Acupuncture compared to placebo-acupuncture for postoperative nausea and vomiting prophylaxis: A randomised placebo-controlled patient and observer blind trial](#). Anesthesia 59:142-149, 2004.
12. Norheim JA, Fennebe V. Adverse effects of acupuncture. Lancet 345:1576, 1995.
13. Yamashita H and others. Adverse events related to acupuncture. JAMA 280:1563-1564, 1998.
14. White A and others. [Adverse events following acupuncture: Prospective survey of 32,000 consultations with doctors and physiotherapists](#). BMJ 323:485-486, 2001.
15. MacPherson H and others. [York acupuncture safety study: Prospective survey of 24,000 treatments by traditional acupuncturists](#). BMJ 323:486-487, 2001.
16. Vincent C. [The safety of acupuncture](#). BMJ 323:467-468, 2001.
17. [Acupuncture needle status changed](#). FDA Talk Paper T96-21, April 1, 1996
18. Wells D. Think acu-practic: Acupuncture benefits for chiropractic. Journal of the American Chiropractic Association 35(3):10-13, 1998.
19. [NCCAOM 25th Anniversary Booklet](#). Burtonsville, MD: NCCAOM, 2007.
20. Department of Education, Office of Postsecondary Education. Nationally Recognized Accrediting Agencies and Associations. Criteria and Procedures for Listing by the U.S. Secretary For Education and Current List. Washington, D.C., 1995, U.S. Department of Education.
21. Sampson W and others. [Acupuncture: The position paper of the National Council Against Health Fraud](#). Clinical Journal of Pain 7:162-166, 1991.
22. [Acupuncture. NIH Consensus Statement 15\(5\). November 3-5, 1997](#).
23. Sampson W. [On the National Institute of Drug Abuse Consensus Conference on Acupuncture](#). Scientific Review of Alternative Medicine 2(1):54-55, 1998.
24. Kalauokalani D and others. [Acupuncture for chronic low back pain: Diagnosis and treatment patterns among acupuncturists evaluating the same patient](#). Southern Medical Journal 94:486-492, 2001.
25. Hogeboom CJ and others. [Variation in diagnosis and treatment of chronic low back pain by traditional Chinese medicine acupuncturists](#). Complementary Therapies in Medicine 9:154-166, 2001.
26. Sherman KJ and others. [The diagnosis and treatment of patients with chronic low-back pain by traditional Chinese medical acupuncturists](#). Alternative and Complementary Medicine 7:641-650, 2001.
27. Zhang GG and others. [The variability of TCM pattern diagnosis and herbal prescription on rheumatoid arthritis patients](#). Alternative Therapies in Health and Medicine 10:58-63, 2004.
28. Zhang GG and others. [Variability in the traditional Chinese medicine \(TCM\) diagnoses and herbal prescriptions provided by three TCM practitioners for 40 patients with rheumatoid arthritis](#). Alternative Therapies in Health and Medicine 11:415-421, 2005.
29. Coetaux RR and others. [Variability in the diagnosis and point selection for persons with frequent headache by traditional Chinese medicine acupuncturists](#). Alternative and Complementary Medicine 12:863-872, 2006.