



Interacting with complementary/alternative medical providers

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Complementary/alternative medical (CAM) providers continue to have a strong presence in the health care of United States citizens. The osteopathic physician may be in the position of having to interpret unfamiliar interventions and unfamiliar terminology as applied to her patient, and runs the risk of being seen as adversarial if she shows resistance or confusion in the presence of CAM influences. This article will describe several common forms of complementary/alternative health interventions, discuss related scientific evidence, if any, and provide information which may be helpful to physicians and patients when considering or integrating different health care paradigms.

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The osteopathic family physician (OFP) has three choices when interacting with complementary/alternative medicine (CAM) providers in the community: rejecting their participation in the care of the physician's patients; attempting to learn enough about the modalities and philosophies of CAM therapies to have a working knowledge will allow the ability to field questions from patients; or actually learning to practice and incorporate some CAM modalities. This article explores some of the more common CAM presences in the United States, reviews possible clinical applications of these interventional styles, discusses some of the challenges in applying evidence-based review principles to them, and addresses common pitfalls in clinical coexistence with CAM providers.

Practicing complete rejection of CAM interventions is cognitively the easiest stance for a physician to take, but is unlikely to improve patient satisfaction and will probably not result in a change in the patient's behavior. If anything, the physician runs the risk of creating a greater divide between the practitioners most important to the patient and may force the patient to choose the one who is not an OFP.

In 2006, researchers at the University of Rochester discovered that 79% of adolescents surveyed had used at least one form of CAM in their lifetimes¹; in 2007, 38.3% of adults surveyed in the United States had used some form of CAM.² If you ignore the presence of CAM providers in the community, you will be ignoring a clinical influence that impacts 40% of the population.

It is more intellectually challenging, but not impossible, to approach a patient's care within an environment that treats everyone involved as part of the same team. In the case of complex or "difficult" patients, a shared burden may actually lighten the physician's load. The typical CAM provider sees far fewer patients per week than a busy OFP practice, and consequently has much more time to spend with each one. In the case of patients who have chronic pain or complex emotional issues, a caring provider who has an hour in which to sit and listen to the patients' process is doing a great service to everyone else who takes care of that patient, as well as to the patient.³

Several of the most commonly used CAM systems follow (Table 1), as well as a discussion of the evidence (if any) supporting their application to common conditions, and exploration of some of the challenges a patient or OFP may face when incorporating such systems into the rest of the care team.

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Acupuncture

Acupuncture may be the most used method of CAM in the United States; there are three basic styles: Western, or medical acupuncture, which is primarily practiced in the context of anesthesia; traditional Chinese medicine (TCM), which incorporates an integrated system of diagnosis and treatment that is completely separate from that used in Western medicine and which may use herbs in addition to needles; and five-element acupuncture, which is probably the most esoteric and which uses a system of balancing different aspects of the patient's character, described as air, metal, wood, fire, and water.

The subtleties of each style are beyond the scope of this article, but all are unified by the common principle of *qi* (chee). Qi, or Ki in Japanese, is the life force or energy that runs along predictable anatomical pathways, or meridians. The needles in acupuncture create "signposts" along the meridians that signal the appropriate direction of the *qi*, and that, it is hoped, balance the energetic system of the patient so that the patient's energy is distributed in a healthy manner.

Because the meridians run through anatomical landmarks, they are often labeled in English according to the major organs through which they pass. For example, a meridian that runs through the middle of the left thorax and out through the leg is identified as the "spleen" meridian. To a Western physician, or to a patient used to Western medicine, this may be confusing nomenclature because the types of issues treated via the spleen meridian have very little to do with the anatomical spleen as we understand it. It may also be important to remind patients that when their acupuncturist alludes to "tonifying the spleen" or "mobilizing liver *qi*," the intention is probably not to impact the lymphatic or hepatic system.

Acupuncture training in the United States may be done as a three- to four-year process involving a comprehensive education in the entire system of traditional Chinese medicine or five-element acupuncture, or it may involve as little as a week-long intensive program. In the latter approach, acupuncture is used as a treatment modality rather than as part of an independent system of medicine.

Challenges in research on acupuncture

The gold standard of medical study, the randomized controlled trial with double blinding, is impractical in the study of acupuncture for several reasons. The most obvious barrier is that it is impossible to perform or withhold acupuncture without both the patient and the clinician being aware. Some researchers have attempted to work around this by performing "sham" acupuncture, in which needles are placed on the patient in places other than the meridians. However, studies have shown that both sham acupuncture and true acupuncture show benefit compared with no treatment at all,⁴ so there are some confounding variables. Many of the studies simply compare two different therapies, e.g.,

acupuncture vs. physical therapy or acupuncture vs. manipulation.

Evidence supporting the use of acupuncture

The most well-supported application of acupuncture is for pain management of various conditions. It has been demonstrated, for example, that acupuncture reduces neuropathic pain in rats, and that these pain-reducing effects are blocked by naloxone or other opioid antagonists.⁵ Acupuncture has been listed by the Osteoarthritis Research Society International as one of the 25 recommended interventions for osteoarthritis,⁶ and rigorous studies have illustrated acupuncture's use in treatment of osteoarthritis.⁷ Evidence is also good for acupuncture's application for chronic low back pain,⁸ although there is less support for its use in acute back pain. Acupressure has also outperformed physical therapy in treatment of low back pain.⁹ Other effective uses for acupuncture include treatment of postoperative or chemotherapy-related nausea¹⁰ and tension headaches¹¹; in one well-known case, James Reston, a columnist who accompanied President Nixon to China, received acupuncture to relieve a postoperative ileus.

What patients should know

The Food and Drug Administration (FDA) sets guidelines on the use of clean needles and universal precautions on contact with body fluids. Needles are disposable and should be used only once and placed in a Sharps container after a treatment.

Acupuncture is generally safe, with the most common side effects being pain at the site of needle insertion, bruising, headache, nausea, or fainting.¹² Severe side effects, such as pneumothorax, are extremely rare and would not be typical from the practice style of most acupuncturists.

If a patient is taking coumadin, aspirin, or otherwise has bleeding concerns, it is important for the patient to notify the acupuncturist before treatment.

An acupuncturist may also use herbal formulas, either brewed into a tea or available in compound pill form. Other manual therapies in Chinese medicine include coining, or rubbing a flat surface vigorously over the skin, and cupping, which involves the use of glass domes applied to the skin to draw out blood stagnation. Although the latter is not painful, it may leave a large bruise.

Naturopathy

Naturopathy is a fully integrated system of medicine based on six fundamental principles, some of which have a great deal in common with osteopathic medicine:

- (1) trust in the body's inherent wisdom to heal;
- (2) looking beyond the symptoms to the underlying cause;

Table 1 Types of complementary/alternative medical providers

	College accreditation	Accredited Colleges in North America	Certifying board and/or requirements	Certification required for license	Allowance to practice as PCP
Acupuncture	Acupuncturist must have attended a school accredited by the ACAOM for certification	61 available, with programs lasting about 3 years	National Certification Commission on Acupuncture and Oriental Medicine	Acupuncturist may be licensed without being certified by NCCAOM but rules vary from state-to-state	In some states, scope of practice is as wide as that of a PCP, but this is unusual Acupuncturists cannot prescribe Western pharmaceuticals but many may prescribe either compounded or raw herbs
Naturopathy	No certifying board for clinicians, but there is a certifying board for schools (Association of Accredited Naturopathic Medical Colleges)	18 available, 7 are accredited.	To practice, clinician requires a 4-year graduate degree and must take NPLEX, the naturopathic physicians licensing exam	In 15 states and the District of Columbia	NDs do not usually prescribe allopathic pharmaceuticals, but do use supplements and homeopathic remedies
Homeopathy	Homeopathy has no standard certifying board.	Training may be a diploma course or part of a Naturopathic Doctoral program	No standard or independent licensure for homeopathic practitioners; licensure is only available as part of an ND	Restrictions limited regarding who may self-identify as a "homeopath" or "homeopathic doctor"	Homeopathic doctors may serve as a PCP but they typically do not have legal scope of practice to do so: they cannot prescribe pharmaceuticals but can recommend homeopathic remedies that are available over-the-counter
Reiki	No standard certifying board	n/a	No standard but some systems have a specific training pathway	No existing license	Reiki clinicians do not prescribe and never function as a PCP
Hypnotherapy	Could be clinically or lay trained	If trained through ASCH, requires licensure in some other clinical practice, 40 hours of workshop training, 20 hours of individualized training, and 2 years of clinical application	American Society of Clinical Hypnosis (ASCH), unless a lay hypnotist	Not all states require certification or licensure; lay training is less standardized	Hypnotherapists may only function as a PCP if already practicing as one via a different track

PCP = primary care physician.

- (3) use of the most natural and least invasive therapies possible;
- (4) education of patients in the maintenance of their own health;
- (5) treatment of the body as an integrated whole, with spiritual and physical dimensions; and
- (6) focus on overall health, wellness, and prevention of disease.¹³

Naturopathic treatments are likely to involve dietary changes, nutritional supplements, and lifestyle change assignments. Some naturopathic interventions may also include the use of homeopathic remedies, which will be discussed later.

In some states, a Naturopathic Doctor, or ND, has a scope of practice equivalent to that of any other primary care physician. They can order diagnostic tests, provide health screening including Pap smears and other examinations, and can address issues pertaining to every body system, although they do not typically take a system-based approach to care, preferring to work more holistically.

Research

It is exceedingly difficult to subject naturopathic medicine to the academic rigors expected by allopathic or osteopathic research. The treatment plan is holistic, rather than symptom-based, and the ideal outcomes are approached in a similarly global fashion. Consequently, to study naturopathy and its impact on, for example, irritable bowel syndrome, would be by necessity misleading, because there is no one specific intervention that is always seen as appropriate for every patient, and because it is unusual for a naturopathic doctor to be treating something as narrow as irritable bowel, *per se*.

One published study demonstrated that a naturopathic approach to low back pain was more cost effective than a patient education system.¹⁴ However, the scope of what was considered a naturopathic approach included acupuncture, exercise and dietary advice, relaxation training, and a back-care booklet, so it is difficult to discern whether it was a naturopathic system that made the difference or whether it was the increased level of attention paid to the patient.

What patients should know

A patient working with a naturopathic doctor should be aware that the goal is a long-term systemic change. For such a change to take place, the patient must be committed to significant alterations in diet; rigorous adherence to dietary supplements, many of which may be expensive and/or not covered by insurance; and they must be comfortable with delayed gratification. The patient should not expect the same turnaround time in recovery as might be expected after taking an antibiotic for strep throat, because the extent of the change desired is much broader than the alteration of a single body system.

It is also important to remember that although a true ND has as many as four years of postgraduate training and licensure in some states, many people may self-identify as a naturopath and open a practice as such, without having the training to become a true ND. This is similar to the distinction between a European trained osteopath and a DO. This is not to imply that the naturopath, or osteopath, is incompetent, but patients should be aware of the distinction.

Homeopathy

Homeopathic treatments are derived from the premise that every person has a self-healing response that is mediated by a vital force. When a symptom or illness is present, it is assumed that this vital force is out of balance. Homeopathic interventions are based on the idea that "like cures like," or in other words, that a symptom may be treated by giving the patient a minute dose of a substance which, in larger doses, would produce the same symptom. For example, a patient might be given a homeopathic dose of a sedating substance as part of a cure for somnolence, which in turn should stimulate the body to react against its sedating influence and become more energized.

As with naturopathic treatment, homeopathic practitioners use a very extensive, personalized interview that entails all aspects of the patient, far beyond the particular symptom being treated. Although it is possible to only treat symptoms remedy by remedy, the true goal is to bring the entire system back into balance, rather than to eliminate one narrow area of discomfort. In a true homeopathic care system, two patients with the same symptom may receive very different interventions because of all the other associated aspects of the patient's situations.

In the United States, there are many roads to education in homeopathy, including short courses, diploma courses, correspondence courses, and as part of naturopathic education. It is not unusual for homeopathy to be incorporated into such other systems of practice as chiropractic, dentistry, veterinary medicine, or allopathic or osteopathic medicine.

Research

Much of the research on homeopathy has dealt with the application of particular remedies for particular problems, rather than application of the actual holistic system of homeopathy as applied to patient populations. Clinical trials have demonstrated some significant improvement in allergies,¹⁵ acute childhood diarrhea,¹⁶ and vertigo,¹⁷ although the studies have varied widely about the quality of design. Researchers have found no proposed biological mechanism to explain the demonstrated effectiveness of homeopathic remedies.

What patients should know

Homeopathic remedies are created by diluting the treating substance to such an extent that sometimes not one molecule of the original substance remains. It is believed that the healing aspects of the substance remain even after the physical presence is gone. Consequently, it is unlikely that a patient would have an allergic reaction or other adverse effect.

The FDA does regulate homeopathic remedies to a certain extent, in that the labels are required to list indications for use, ingredients, and instructions for safe application.¹⁸ Patients should also be aware that some of the remedies are diluted in alcohol and are allowed to contain a higher concentration of alcohol than are acceptable for conventional OTC drugs.¹⁹

Energy (Reiki, therapeutic touch, prayer)

Treatments that work on a spiritual or energetic level are the most difficult to quantify and the most difficult to describe. There are many styles of energetic medicine, with Reiki, a system of Japanese origin, being perhaps the most well known. All operate on the premise of a transfer of energy, life force, or *qi*, either with the practitioner directly applying the energy or working as a channel through which the energy flows from a divine or universal source. The healing energy may be applied with the practitioner's hands placed directly on the patient, or held above the patient or from a distance, including over miles or continents. Energetic healing works on the premise that there are anatomic areas on the body associated with energy centers, and that some of these centers may become disrupted or depleted, resulting in illness or distress. The goal of energetic medicine is to balance and tonify these energetic sites, allowing the patient's system to be restored to health.

Training in energetic medicine may take the form of a weekend workshop, or it may take years of intensive study. There are also levels of certification within each system, which are attained after additional learning and practice. Competence in energetic medicine is assumed to be not just a function of duration of training, but also of the ability to focus healing intention correctly.

Challenges in research on Reiki, therapeutic touch, and other energetic modalities

One study showed that Reiki failed to demonstrate improvement in fibromyalgia symptoms in a clinical trial.²⁰ Studies on prayer—another form of focused intention—for patients in the intensive care unit have also suggested lack of impact. However, such studies may draw the reader to misleading or inaccurate conclusions. A system of treatment that is energetic or spiritual, or works through focused intention, is impossible to standardize.

What patients should know

The tradition of Reiki holds that whether the Reiki recipient is experiencing a subjective change in energy flow within her body, the therapeutic benefit continues. It is also not theoretically possible to damage a client using Reiki, because the healer is the channel for the therapeutic energy, rather than the true applicant of it; only good comes of it. Patients receiving Reiki may experience feelings of improved symptoms, increased relaxation, or nothing at all. They are unlikely, however, to experience pain or illness from it.

Hypnotherapy

Hypnotherapy is the clinical application of hypnosis, a technique in which the patient, or subject, is guided into a state of inner absorption, concentration, and focused attention.²¹ Once the patient is in this altered state of consciousness, the hypnotherapist may make suggestions, in which a patient is encouraged to imagine new alternatives to the present situation and become confident in the ability to implement them. For example, if in a hypnotic state, a patient is envisioning their arthritic knees as damaged and rusty, the hypnotherapist may make the suggestion that they see the knees as fluid and clean while in motion. If the patient is attempting to stop smoking, the hypnotherapist may suggest to the patient in a hypnotic state that they are now a non-smoker.

There are two basic approaches to training in hypnotherapy: professional training and licensure, or lay training. The American Society of Clinical Hypnosis (ASCH) or the Society for Clinical and Experimental Hypnosis are the only nationally recognized organizations for licensed health care professionals who apply clinical hypnosis.²¹ Certification by the ASCH requires proven professional training and licensure at the level appropriate for the profession (Doctor of Osteopathy, Medical Doctor, Licensed Clinical Social Worker, Doctor of Dental Surgery, etc.): a minimum of 40 hours of workshop training in clinical hypnotherapy, a minimum of 20 hours of individualized training with an ACSH-certified consultant, and evidence of two years independent clinical application of hypnotherapy.

A lay-trained hypnotherapist is not required to have a professional clinical degree, and the range of training may be anywhere from a weekend workshop to more than 200 hours of applied hypnosis education. Consequently, lay training and/or certification may not be indicative of the level of competency.

Research

Hypnotherapy has shown possible benefit in relief of hot flashes in women who are postmenopausal but are unable to take hormone replacement because of a history of breast

cancer.²² Self-hypnosis also demonstrated reduction in pain and anxiety in women undergoing a breast biopsy, without the cost of going to a hypnotherapist.²³ Hypnobirthing, a style of childbirth preparation that teaches the laboring woman to put herself into a trancelike state as a way of managing pain and anxiety, has also increased in popularity. The results of studies on hypnosis for weight loss and tobacco cessation have been mixed.

What patients should know

There is a difference between a licensed clinical hypnotist, which implies a health care professional with a license in his or her own field, and a certified hypnotist, for which there is no uniform set of requirements. Certification bodies may be only self-designated and most states do not have a licensure for hypnosis as its own entity.

Hypnotherapy is a facilitated form of self-direction. A patient is not being “mind-controlled” by the hypnotherapist and cannot be manipulated into following someone else’s agenda simply because of being under a hypnotherapist’s care.

Challenges in coexistence

Licensure and certification of CAM providers vary from state to state, and may or may not be reflective of true competency, as is the case with osteopathic physicians. Similarly, not all CAM providers even have the ability to become licensed in their area of expertise, and some certifying bodies are self-regulated political entities rather than true instruments of quality control. How, then, can a physician participate in maintaining the integrity of the patient’s care? How can a physician be assured of the competence of the local CAM providers?

When referring to any specialist, licensure is rarely the only yardstick the OFP uses; they consider the entire scope of what the patient will receive and how the specialist will interact with other members of the team. The same principles may be applied to coexisting with CAM providers in the community. Is the provider willing to communicate directly with the OFP (and many welcome the opportunity), or is the patient left to report their own interpretation of the intervention? Does the provider seem willing to work collaboratively, or seem to undermine the treatment plan the OFP and patient are using (e.g., a provider who tells a patient, “Work with me for six months and you could get off your anti-convulsant!”)? Does the provider show good boundaries, both in terms of patients and in terms of peers, or do they make claims in excess of their abilities, display a critical or sneering attitude toward Western medical practices (“All doctors want to do is drug you or cut you!”), or seem unduly controlling of the patient and to whomever else they bring their health concerns? Most importantly, does the

patient feel heard and well cared for? Do other patients who have seen that provider report a good experience?

OFPs are especially well-equipped to navigate these waters. They may practice some form of CAM themselves, and all are familiar with the experience of having a professional degree that requires explanation to other clinicians. Because the application of evidence-based medical principles to osteopathic manipulation is still in its early stages, OFPs also understand the challenges inherent in attempts to measure a style of care that is widely understood to be effective, but which nonetheless does not always fit the “mold” of our current research system.

There is no universally appropriate model for studying the care of human beings. Even the most well-designed study is much better at predicting outcomes for populations than for individuals. This issue becomes even more complex when attempting to apply the standards of physics and chemistry to systems of healing that do not operate according to physics and chemistry: How would the researchers control for the Reiki master having an off day? How would a study create inter-practitioner standardization, when the practice and the abilities are more closely related to the individual’s skill level and experience—as with an artist—than they are to the intervention itself, as would be the case in a pharmaceutical in which standardization of dose and content is possible?

There are similar hurdles in the study of prayer: Is a Catholic schoolboy’s prayer an equivalent intervention to the Pope’s prayer? Whose prayer works better on cancer, a Buddhist nun or a Catholic nun? It may be that we simply lack effective tools for evaluating all of the modalities that our patients choose to apply. And it is ultimately the choice of the patient, not the doctor, about how to approach wellness.

References

1. Wilson KM, Klein JD: Herbal products and their association with substance abuse in adolescents. *J Adolesc Health* 38:395-400, 2006
2. National Institutes of Health, National Center for Complementary and Alternative Medicine: *The Use of Complementary and Alternative Medicine in the United States*. Bethesda, MD: NIH, 2007
3. Iezzoni LI: Going beyond disease to address disability. *N Engl J Med* 355:976, 2006
4. US Department of Health and Human Services, Public Health Service; Agency for Healthcare Research and Quality: *Acupuncture for Osteoarthritis*. Technology Assessment US Dept of Health and Human Services. Rockville, MD: AHRQ, 2003:1-27. In Gamaluddin S, Kirchner JT: *Acupuncture: what the evidence shows*. *Fam Pract Recert* 28:26-28, 33-37, 2006
5. Omana I, Olvera B, Santo P, et al: Naloxone prevents reduction of pain responses evoked by acupuncture in neuropathic rats. *Proc Western Pharm Soc* 37:135-136, 1994
6. Zhang W, Moskowitz RW, Nuki G, Abramson S, Altman RD, Arden N, et al: OARSI recommendations for management of kip and knee osteoarthritis. *Osteoarthritis* 16:137-162, 2008
7. Witt C, Brinkhaus B, Jena S, et al: Effectiveness of acupuncture as adjunctive treatment in OA of the knee. *Lancet* 366:136-143, 2005

8. Manheimer E, White A, Berman B, et al: Meta analysis: acupuncture for low back pain. *Ann Intern Med* 142:651-663, 2005
9. Hsieh LL, et al: Treatment of LBP by acupressure and physical therapy: a randomized controlled trial. *BMJ* 332:696-700, 2006
10. National Institutes of Health: NIH 1997 Consensus Development Panel on Acupuncture. *JAMA* 280:1518-1524, 1998
11. Linde K, Allais G, Brinkhaus B, et al: Acupuncture for tension-type headache. *Cochrane Database of Systematic Reviews* (1):CD007587, 2009
12. Ernst E, White A: Prospective studies of the safety of acupuncture. *Am J Med* 110:481-485, 2001
13. American Association of Naturopathic Physicians. Home page. Available at: <http://www.naturopathic.org>
14. J Herman PM, Szcyrko O, Cooley K, et al: Cost-effectiveness of naturopathic care for chronic low back pain. *Alt Ther Health Med* 14:32-39, 2008
15. Taylor MA, Reilly D, Llewellyn-Jones RH, et al: Randomised controlled trial of homeopathy versus placebo in perennial allergic rhinitis with overview of four trial series. *BMJ* 321:471-476, 2000
16. Jacobs J, Jimenez LM, Malthouse S, et al: Homeopathic treatment of acute childhood diarrhea: results from a clinical trial in Nepal. *J Alt Comp Med* 6:131-139, 2000
17. Weiser M, Strosser W, Klein P: Homeopathic vs. conventional treatment of vertigo: a randomized double blind controlled clinical study. *Arch Otolaryngol Head Neck Surg* 124:879-898, 1998
18. Food and Drug Administration: Conditions under which homeopathic drugs may be marketed. *Compliance Policy Guides Manual*, Sec 400.400. Revised 1995
19. National Center for Complementary and Alternative Medicine: Homeopathy: An Introduction. Available at: <http://nccam.nih.gov/health/homeopathy>. Accessed September 23, 2009
20. Assefi N, Bogart A, Goldberg J, et al: Reiki for the treatment of fibromyalgia; a randomized controlled trial. *J Alter Comp Med* 14: 1115-1122, 2008
21. American Society of Clinical Hypnosis. Definition of hypnosis. 2008 Available at: <http://asch.net/genpubinfo.html#define>. Accessed September 17, 2009
22. Elkins G, Marcus J, Stearns V, et al: Randomized trial of a hypnosis intervention for treatment of hot flashes among breast cancer survivors. *J Clin Oncol*. <http://jco.ascopubs.org/cgi/content/abstract/26/31/5022>. Accessed September 17, 2009
23. Lang EV, Berbaum KS, Faintuch S, et al: Adjunctive self-hypnotic relaxation for outpatient medical procedures. *Pain* 126:155-164, 2006