## Op-Ed

## The principles and challenges of integrative medicine

More than a combination of traditional and alternative therapies

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Correspondence to: vmaizes@ahsc.arizona. edu Integrative medicine is a new term that sometimes is used interchangeably with complementary and alternative medicine, and at other times refers to treatments that combine conventional medicine and alternative modalities. We define the fundamental principles of integrative medicine differently.

Central to our definition of integrative medicine is the body's innate ability to heal. Healing is believed to originate within the patient rather than the physician. For example, a patient presents with pneumococcal pneumonia and an antibiotic is prescribed. The patient recovers. Has the doctor cured the patient, the antibiotic eradicated the pneumonia, or the patient's immune system, assisted by the antibiotic's reduction of bacterial load, led to the patient's recovery? Integrative medicine asserts the latter.

Integrative medicine requires a shift from the "fixing" paradigm that has been central to biomedicine. When pathology is emphasized, the individual's experience of being ill and the social context of disease are neglected. Instead, an integrative medicine physician helps the patient consider the meaning of the illness for that patient, which can serve as a powerful agent for change and for healing. Language is used to support this natural tendency toward healing. A woman with metastatic lung cancer writes to her integrative medicine physician, "My body is falling apart...my spirit soars." Despite a low likelihood of cure, this woman articulates a healing process and sense of wholeness.

Sir William Osler's famous words—"It is much more important to know what sort of patient has a disease than what sort of disease a patient has"—express another principle of integrative medicine. Integrative medicine focuses on the needs of each individual human being, asking the questions, "What do you love? What gives you strength in times of trouble? What gives your life purpose or meaning?" Although not typical questions asked during a physician visit, these questions are essential in integrative medicine, because they allow providers to understand their patients' values and the context in which they live. It is then possible to design a unique treatment plan.

The principles of integrative medicine maintain that the experience of a therapeutic relationship facilitates the healing process. The physician emphasizes the patient's participation and responsibility and recognizes the patient's preferences and self-knowledge when designing a treatment plan. Integrative medicine focuses on prevention as a means of enhancing health and well-being. Five areas of prevention are addressed: physical activity, nutrition, screening, stress management, and spirituality. The first three are commonly stressed by traditional physicians, but often without specific recommendations.<sup>2</sup> For example, the relationship between diet and certain chronic diseases is often not addressed. Physicians who practice integrative medicine are encouraged to inquire about patients' sources of stress and coping strategies. Regular practice of relaxation such as t'ai chi or meditation are recommended to patients, as are breathing exercises and self-hypnosis. Physicians inquire about the patient's spiritual life, because they consider understanding this aspect of patients' lives as critical to promoting health.

Complementary and alternative medicine serves an important role in integrative medicine, yet the two are not synonymous. The former opens new paradigms for many conventionally trained physicians; for example, explaining the Chinese medical system's use of moxibustion to turn a breech baby. The latter is committed to the practice of good medicine whether its origins are conventional or alternative<sup>4</sup>; for example, offering adaptogens for replenishing the qi, mind-body, as well as nutritional recommendations to patients with "fatigue," when the lack of a clear diagnosis may not lead an allopathic physician to offer treatment. Complementary and alternative medicine assists the practitioner of integrative medicine in taking a holistic approach.

Although centers of integrative medicine have opened in many cities, little has been written about how complementary and alternative medicine and allopathic providers collaborate to provide care. Getting to know patients takes time; in the old general practice model, physicians had a lifetime in which to get to know their patients. Today's mobile society, as well as economic incentives in our current healthcare systems, do not support this time investment. Finally, it is unclear how evidence-based medicine should be applied to integrative medicine, when the field stresses individual treatments and is willing at times of low risk to use unproven treatments.

Integrative medicine shifts the paradigm from sickness to health, keeps the patient in the central focus of care, and multiplies the number of strategies available to the patient. It is a new kind of medicine that shifts the experience for both patient and provider.

## References

- 1 Oumeish OY. The philosophical, cultural, and historical aspects of complementary, alternative, unconventional, and integrative medicine in the Old World. Arch Derm 1998;134:1373-1386.
- 2 Donohoe MT. Comparing generalist and specialty care: discrepancies, deficiencies and excesses. Arch Intern Med 1998;158:1596-1608.
- 3 Cardini F, Weixin H. Moxibustion for correction of breech presentation. JAMA 1998;280:1580-1584.
- 4 Gaudet TW. Integrative medicine: the evolution of a new approach to medicine and to medical education. Int Med 1998;1:67-73.
- 5 Anderson R. A case study in integrative medicine: alternative theories and the language of biomedicine. J Alt Comp Med 1999;5:165-173.

## Complementary and alternative medicine needs an evidence base before regulation

Why train practitioners in therapies that do not work?

Complementary and alternative medicine is practiced by both physicians and nonphysicians—by far more nondoctors than physicians in most countries. Physicians may employ acupuncture, hypnosis, biofeedback, or any of the other modalities of complementary and alternative medicine. Osteopathic doctors in the United States learn spinal manipulation in their training, although many later choose to make little use of it in routine practice.1 Chiropractors are licensed in every state of the United States, acupuncturists licensed or certified in 32 states and the District of Columbia, massage therapists in 25 states, and naturopaths in 11 states. Homeopathy is separately licensed only in Arizona, Nevada, and Connecticut, although other states may include homeopathy in the scope of practice of naturopaths, chiropractors, or oriental medicine practitioners. Herbalism is not separately licensed or certified, but it is considered within the scope of practice of naturopaths, acupuncturists, or chiropractors in some states. There are no separate licensing or certification standards for other complementary and alternative medicine practices.

In the United Kingdom, complementary and alternative medicine (with the exception of homeopathy) is almost entirely in the hands of therapists without medical qualifications. The number of these therapists is now estimated to equal that of primary care physicians. Since it was established in 1948, the British National Health System has incorporated homeopathy; it still operates five homeopathic hospitals, run by physicians. There are neither statutory regulations nor minimal educational requirements for practitioners of complementary and alternative medicine in the United Kingdom. Laudable initiatives, however, are about to change this situation for osteopathy and chiropractic.<sup>2</sup>

What do we know about practitioners of complementary and alternative medicine? Generally they are

sincere people, dedicated to helping patients. Yet cynics would probably point out that sincerity renders a quack only more dangerous to the public. A large proportion of these practitioners subscribe to holistic worldviews and have relatively little regard for or knowledge of science.3 Most earn only a modest income.4 Practitioners tend to work in small, often single-handed practices, and their referral rates to physicians are low. 5 They spend long periods of time with patients and there is evidence (albeit inconclusive) to suggest that they often develop better therapeutic relationships with their patients than do physicians. In the United Kingdom, most practitioners of complementary and alternative medicine say they would like to practice more extensively within the regular health services but, due to their relatively long consultation times and hence high costs per patient, it is doubtful whether their services will prove to be affordable.8 Complementary and alternative medicine might therefore continue to be mostly private medicine.

Practitioners' training in complementary and alternative medicine is highly variable. Most have benefited from some formal training,<sup>8</sup> but many physicians still worry about their medical competence. The degree of competence required to guarantee patients' safety varies for obvious reasons. It is necessarily high when therapies associated with potentially serious adverse effects are being administered, such as spinal manipulation, acupuncture, or herbal treatments.

While regulation and training are to be applauded, establishing an evidence base must logically precede regulation of the practice of complementary and alternative medicine. If, for instance, iridologists would regulate all aspects of their profession, including rigorous training in the art of iridology, this would not change the science, which shows that this diagnostic technique is not valid.<sup>9</sup>

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