



Alternative medicine: Underevaluated or ineffective?

UNTIL ABOUT 25 YEARS AGO, the term “medicine” stood alone, requiring no further description or adjective. Practitioners of the healing arts who were not doctors or nurses of medicine were called quacks.

Today, what was once just “medicine” has become “mainstream” medicine, “conventional” medicine, or “allopathic” medicine. Meanwhile, some of the erstwhile quacks are now practitioners of “alternative” medicine or “complementary” medicine.

The wall between mainstream medicine and alternative medicine used to be impenetrable. For instance, the American Medical Association’s *Principles of Medical Ethics* forbade physicians from collaborating with all varieties of alleged quacks, including chiropractors, podiatrists, and even osteopaths.^{1,2} It aggressively worked to stifle such associations through its Committee on Quackery.¹

How the world has changed. Today the AMA’s harsh strictures against consorting with the alternative practitioners has eased, to the point where the AMA journals will soon be publishing entire issues devoted to the topic of alternative medicine.³ Although there are certainly real quacks still out there, the tag is far less liberally applied, and the fashion these days is to look for value in unconventional approaches to illness and wellness.

Most physicians are now well aware that many of their patients are consumers of some form of alternative medicine. As Vann⁴ pointed out in a recent issue of the *Journal*, sales of herbal medicine alone have reached \$2.5 billion a year. As much as \$14 billion a year may be spent on all types of alternative treatments.³ The challenge for today’s physicians is to keep abreast of what their patients may be doing, and keep the lines of communication open.

■ WHAT IS ALTERNATIVE MEDICINE?

The term “alternative” medicine implies that its treatments, such as homeopathy and herbal medicine, are often used instead of conventional medical therapies. Complementary medicine, on the other hand, suggests that conventional and complementary treatments are not mutually exclusive and may be used together, such as acupuncture or biofeedback in a patient undergoing conventional medical treatment for a painful arthritic condition. However, there is a considerable blurring of how these terms are used, with “alternative medicine” often being used to describe any unconventional method of diagnosis and treatment.

■ HOW DOES ALTERNATIVE MEDICINE MESH WITH MAINSTREAM MEDICINE?

Some recent articles in the mainstream medical literature have proposed that complementary medicine is preferable to the use of unconventional treatments that discourage mainstream treatments.^{5–7} Numerous surveys show that the majority of practicing physicians, especially generalists, see value in at least some forms of alternative medicine.^{8–14} However, not all forms of alternative medicine are considered equally complementary or useful, and there is a spectrum of disciplines ranging from quackery on the far left to conventional medicine on the right. Particularly favored were chiropractic, acupuncture, and hypnosis, less so homeopathy and diet therapy, and least favored were reflexology, iridology, faith healing, and Native American traditional medicine.^{8,10,13}

In 1992 Congress mandated that the NIH create the Office of Alternative Medicine

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(OAM) to promote the study of alternative medicine. An advisory board was appointed in 1994, and seven different broad areas for study were identified: alternative systems of medical practice; bioelectromagnetic applications; diet, nutrition, lifestyle changes; herbal medicine; manual healing; mind-body control; and pharmacological and biological treatments.¹⁵ The Office has established and funded centers for alternative medicine in cancer, women's health, stroke and neurological rehabilitation, HIV and AIDS, pain (two centers), aging, addictions, internal medicine, asthma and allergy, and chiropractic. The 1998 budget for the OAM is projected at \$20 million, a 67% increase over the 1997 budget.¹⁶

■ ALTERNATIVE MEDICINE AND THE SCIENTIFIC METHOD

Despite all this attention, data on efficacy of various alternative modalities leave a lot to be desired.¹⁷ For example, although over 150 controlled trials of homeopathy have been reported, only 15% to 20% of these studies are considered "good" by the OAM.¹⁶ A recent Medline search for articles on alternative medicine for the years 1992 to 1997 yielded 96 references, of which only 30 reported data, and all of the latter were opinion surveys of either patients or physicians.

Part of the problem is difficulty in performing valid controlled trials, since people who are receptive to unconventional treatment may differ from those who are not receptive to alternative treatments. For example, Begbie et al¹⁸ found that, among cancer patients, satisfaction with alternative therapies correlated positively with younger age and marriage and negatively with good responses to conventional treatment. Blais et al¹⁹ found that users and nonusers of alternative medicine differed in age, activity, education, and income. On the other hand Boisset and Fitzcharles²⁰ were unable to confirm these findings in a group of rheumatology patients, as were Elder et al²¹ in family practice patients. While Furnham and Smith²² found no differences in sex, age, education, marital status, religion, or income between patients consulting a general practitioner vs those seeing a homeopath, they did identify a "higher

psychiatric morbidity" among those seeking homeopathic treatment. All of this disagreement about the validity of research into alternative medicine just adds to the confusion surrounding this issue.

Another difficulty in studying alternative medicines is the standardization of treatments. As Vann⁴ pointed out, many herbal preparations are not standardized for ingredients or potency. Many herbal preparations with the same name may contain different blends of ingredients at different dosages.

Some grumpy souls in the medical establishment continue to dismiss all of alternative medicine by emphasizing its shortcomings. Physicians are particularly concerned when patients delay obtaining effective standard treatment to try alternative treatments, such as homeopathic methods, possibly leading to avoidable but irreversible damage.²³ Substitution of ineffective alternative treatments for more effective conventional ones can also have dire consequences.²⁴ Direct ill effects of alternative interventions, for example acupuncture in diabetics, can also be disastrous.²⁵ A sign of the growing power and affluence of the alternative medicine industry: the malpractice attorneys are licking their chops.²⁶

■ WAITING FOR DATA

As we consider the pros and cons of alternative treatments, it is important to keep in mind the distinction between the underevaluated and the ineffective. Considering the medical community's pragmatism, it may seem unlikely that truly effective therapies will long go unused. Nonetheless, this can happen, and a case in point is the three decades that elapsed between the introduction of methotrexate and its now widespread use in rheumatoid arthritis. Physicians clearly are much more broadminded today about unconventional approaches than they were in the past, but they rightly continue to demand that proposed treatments be subjected to the rigors of scientific evaluation. The establishment of the OAM is a positive step toward making sure that this occurs and that real quackery is exposed for what it is.

At the same time, we as physicians are faced with the problem that many of our patients are taking treatments for which there

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is little scientific support. However, for us, ignorance of what our patients are taking is not bliss. Many herbal medicines have effects, side effects, and drug interactions that are potentially serious. And reliance on other alternative therapies can undermine compliance with proven, conventional treatments.

The challenge for us is to keep the dialogue open with our patients, so we know what they are doing and can advise them, in a nonjudgmental fashion, about potential dangers of these treatments.



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