What Is the Role of Complementary and Alternative Medicine in Public Health?

What is the role of complementary and alternative health care and medical practices in the health and well-being of the public? With this extraordinary collection of articles and essays, the Journal explores this question and helps to open a new period in the history of public health. Although long an integral part of the health systems of societies all around the globe, the relationship between public health and traditional or indigenous health practices has not often been a congenial or collegial one. Yet the question of the proper role of complementary and alternative medicine (CAM) in the health of the public remains perhaps the most important one to be asked by readers of the Journal, both supporters and detractors of approaches that are beyond the pale of conventional biomedicine. It is a question with a complex set of answers.

CAM AS SECTORS OF THE PUBLIC HEALTH SYSTEM

First, it is critical that policymakers and public health personnel gain an understanding of the extent to which complementary and alternative health care forms an integral, albeit often marginal or marginalized, part of the public health apparatus at the disposal of any society. CAM may represent a substantial and largely untapped resource base. The World Health Organization estimates that most people in developing nations receive the bulk of their health care from traditional or indigenous health systems.[1] In Mozambique, for example, where there is one physician for every 50 000 people, there is a traditional healer for every 200.[2] However, this is not a phenomenon of underdevelopment. Estimates for the United States, the United Kingdom, and Australia all hover near the 50% mark as well, and in France, 75% of the population report the use of alternative medicines.[2]

In terms of control over social, scientific, political, and economic discourses, what some scholars call "biomedicine" has held clear ascendancy in the United States for over a century. Indeed, it is biomedicine to which CAM is "complementary" or "alternative"—the National Center for Complementary and Alternative Medicine of the National Institutes of Health defines CAM as "those healthcare and medical practices that are not currently an integral part of conventional medicine."[3] As with so much of the American cultural scene, however, the health care system in the United States has been and remains a pluralistic, oft tempest-tossed sea teeming with dynamically evolving species of healing systems. We have only recently begun to take account of the contributions of this alternative and complementary sector to public health. In a recent reprise of Kerr White's classic 1961 study of the ecology of medical care, Green and colleagues[4] reported in *The New England Journal of Medicine* that complementary and alternative health care providers now account for 65 visits monthly per 1000 population, the overwhelming majority of which are paid out-of-pocket. This compares with 113 visits per 1000 to see a primary care clinician. The authors' narrow definition excluded other CAM activities such as self-care practices and home remedies.

The articles in this issue represent a wide range of therapeutic approaches. The National Institutes of Health classifies the major domains of CAM as "alternative medical systems," "mind-body interventions," "biological-based therapies," "manipulative and body-based methods," and "energy therapies."[3] Alternative medical systems are complete systems of theory and practice that have evolved wholly or largely independently of conventional biomedicine. These include Indian ayurvedic medicine, traditional Chinese medicine, homeopathy, and naturopathy. Mind–body interventions are "designed to facilitate the mind's capacity to affect bodily function and systems."[3] These include conventional approaches such as patient education as well as approaches considered complementary or alternative such as hypnosis or prayer. Biological-based therapies include herbal therapies, dietary supplements, dietary approaches, and the use of other biologically active substances. Manipulative and body-based methods include manipulation, movement, massage, or similar approaches, often within the context of physical or anatomic theories of illness. Finally, energy therapies focus on the role of energy fields within the body or from other sources in the production of disease and the process of healing.

This system of classification is one of several that have been proposed. However, the intellectual point of departure, and the standards by which these therapies are judged, remains that of conventional biomedicine.

THE SCIENCE OF CAM

He who wants to recognize what is alive and describe it, seeks first to drive the spirit out of it. Then, he holds the parts in his hands. But, he is missing the spirit's band.

Goethe, *Faust*, Part 1, Scene 4

A second consideration in addressing the role of CAM in public health is determining effectiveness and efficacy. Merely hosting a special issue on the topic of complementary and alternative public health will not magically resolve the thorny issues that have plagued debate in this area for the past several years. However, to shy away from this debate may be profoundly debilitating to public health in the long term. The complex ontological and epistemological issues involved strike to the very core of our "scientific" approaches to public health, and our ability to avoid conceptual stagnation and continue to gain new knowledge. There can be no question that social and political considerations of established biomedicine have often masqueraded as "scientific" just as surely as there have been charlatans or others blindly supporting untenable beliefs and practices at the expense of the public health.

An interesting compromise was reached in Germany with the passage of the German Drug Act in the 1970s.[5] Concerned by the very idea that "science" could be used to prejudice judgment against potentially effective treatments led to the expansion of the very idea of what is scientific. Or rather, it could be argued that the German approach marked a return to the term's more inclusive meaning as a system of knowledge, and not necessarily the one and only received system of knowledge held by a biomedical scientific establishment. Perhaps from the land that gave the world Martin Luther, one should expect nothing less. The compromise solution involved alternative criteria for the proof of the effect and effectiveness of herbal drugs apart from randomized clinical trial data. In effect, the "scientific standard" by which the efficacy of herbal drugs could be assessed could now be other rational systems and models in addition to the ethnomedical system known as biomedicine.

CONVENTIONAL, ALTERNATIVE, AND COMPLEMENTARY ETHNOMEDICAL SYSTEMS

The cultural diversity of complementary and alternative health practices and systems can indeed be daunting. Kleinman[6] suggests that we understand a society's health care resources as belonging to 3 sectors: popular, folk, and professional. For public health practice and research, there is much to be gained in understanding these health sectors, including scientific biomedicine, as ethnomedical systems within society. Baer[7] has suggested that the American landscape is best understood as a pluralistic continuum of alternative or complementary ethnomedical systems. This continuum ranges from professionalized biomedicine and the parallel medical system of osteopathy to professionalized heterodox systems such as chiropractic, acupuncture, and naturopathy to national and regional folk healing systems such as Appalachian folk medicine to self-care and home remedies used outside of these professionalized and semiprofessionalized systems. While, for instance, Native American health systems are easily understood to fall into a separate system of ethnomedicine, it is indeed helpful to understand that movements such as Christian Science, chiropractic, and spiritualism may also be indigenous ethnomedical systems in the United States.

This type of framework not only leads to interesting social, political, and economic questions but also helps us to understand that the tapestry of care resources for public health is indeed rich. Such a broad reconceptualization of the public health system offers many potential opportunities to improve, expand, and refine what we do, where we do it, for whom we do it, and to what end. This is as true in the developing world, such as in western Africa,[8] as it is in the industrial world, such as in the American South.[9] The opportunity to increase the power and reach of the public health sector through integration of CAM or indigenous practitioners is ignored only at our own detriment.

CAM, CULTURAL DIVERSITY, AND CULTURAL HEALTH

One final consideration must be raised. The past (and present) insensitivity of public health workers and scientists to complementary, alternative, or indigenous systems of health may, at best, reflect a long history of arrogance, exploitation, and colonialism.[10] At worst, it represents a continuing legacy of intellectual, emotional, and spiritual violence committed in the name of the very public we have sworn to protect. Can one claim that a society is healthy that finds its worldview under automatic assault, and the integrity of its culture called into question? This is not a call for cultural relativism so much as a call for cultural tolerance and humility. We may, indeed, have much to learn from one another.

How may we decide on the health of a culture itself? This has been a vexing theoretical and pragmatic question confronting anthropology since Henry Lewis Morgan essentially founded the discipline in the 19th century by trying to salvage what he saw as the disappearing culture of the Iroquois. Healthy societies are composed of healthy individuals, but they are not simply the sum of these parts. Nor can the health of individuals be maximized in the context of ailing social systems or cultures. What role does public health play in promoting and maintaining the health of societies and cultures, particularly in the era of globalization?

Whether it is an integrated model of holistic health care for Native American women,[11] the role of the Black churches in the South in providing mental health services,[9] or drawing upon the lessons of shamanic healing in providing brief psychotherapy for Latino immigrants,[12] the works collected in this special issue represent a snapshot of complementary and alternative approaches that can play a vital role in the health of the public. Although the stan-

dard of positivist biomedical science may not always be a fair point of departure, it is nonetheless the framework within which we decide truth. It can be a purely reductionist model of scientific reason, with its linear model of causality and attempts at objectivity. It can also be a less reductionist approach, where causality may be understood more as a web rather than a thread, and the subjectivity of lived experience once again assumes a prominent role in understanding health and well-being. With this less reductionist approach, the interrelationships between cultural and personal, public and individual health begin to become clearer.

The works collected here represent the beginning of an important dialog for public health. Although in different ways, complementary and alternative health care and healing practices represent a vast and as yet unrealized sector of the public health systems of developed and developing nations. Moreover, the limits of our current biomedical knowledge and capabilities cannot be denied. We do not, as yet, have all the answers, or even, for that matter, know all the questions. There are more things in heaven and earth than can be dreamt of in our current biomedical philosophies. Stagnant biomedical orthodoxy cannot achieve the fullness of public health's potential and has no role to play in human progress. Maintaining an openness to this reality may serve to help marshal the resources of indigenous, complementary, and alternative health practices in the service of public health, now and in the future. ■

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References

1. World Health Organization (WHO). WHO launches the first global strategy on traditional and alternative medicine. Available at: http://www.who.int/inf/en/pr-2002-38.html. Accessed May 20, 2002.

2. McNeil D. With folk medicine on rise, health group is monitoring. *New York Times.* May 17, 2002:A8.

3. National Center for Complementary and Alternative Medicine. Major domains of complementary and alternative medicine. Available at: http://nccam.nih.gov/nccam/fcp/classify. Accessed June 7, 2001.

4. Green LA, Fryer GE Jr, Yawn BP, Lanier D, Dovey SM. The ecology of medicine revisited. *N Engl J Med.* 2001; 344:2021–2025.

5. Weiss R, Fintelmann V. *Herbal Medicine.* New York, NY: Thieme; 2000.

6. Kleinman A. *Patients and Healers in the Context of Culture: An Exploration of the Borderland Between Anthropology, Medicine, and Psychiatry.* Berkeley: University of California Press; 1980.

7. Baer H. *Biomedicine and Alternative Healing Systems in America: Issues of Class, Race, Ethnicity and Gender.* Madison: University of Wisconsin Press; 2001.

8. Green E. Engaging indigenous African healers in the prevention of HIV and STDs. In: Hahn R, ed. *Anthropology and Public Health: Bridging Differences in Culture and Society.* New York, NY: Oxford University Press; 1999:63–83.

9. Blank M. Alternative mental health services: the role of the Black church in the South. *Am J Public Health.* 2002; 92:1668–1672.

10. Helman C. *Culture, Health and Illness: An Introduction for Health Professionals.* Oxford, England: Butterworth-Heinemann; 1997.

11. Napoli M. Holistic health care for native women: an integrated model. *Am J Public Health.* 2002;92:1573–1575.

12. Dobkin de Rios M. Lessons from shamanic healing: brief psychotherapy with Latino immigrant clients. *Am J Public Health.* 2002;92:1576–1578.