Incorporating traditional medicine into Western healthcare

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What is Traditional Medicine?

Traditional medicines, which include herbal remedies, acupuncture and spiritual therapies, have been used for millennia by various peoples to treat acute and chronic illnesses. In many developing countries, they remain the most accessible and most commonly used form of medical care (WHO, 2002). While pharmaceutical medicines are commonly used in developed countries to treat a vast range of infectious diseases and chronic conditions, patients in developing countries continue to rely on traditional medicines for several reasons. For one, herbal medicines are a far less expensive alternative to pharmaceutical drugs in most regions of the world. This makes them the only feasible option for impoverished families who cannot afford to buy Western pharmaceutical drugs, even if they wanted to do so. In countries such as Ghana, where malaria is endemic, a single course of pyrimathine/sulfadoxine antimalarial drugs can cost several dollars, whereas traditional Ghanaian herbal medicines are considerably less expensive (WHO, 2002). There is also a discrepancy in many countries in the number of traditional medicine practitioners as opposed to medical doctors available to the public. In Uganda, the ratio of traditional medicine practitioners to the total population is between 1:200 and 1:400, but the ratio of doctors to the total population is 1:20,000 (WHO, 2002). This limited access to Western medical professionals and pharmaceutical drugs necessitates continued use of traditional medicines in many countries.

Interestingly, in recent decades, traditional medicine practices have grown increasingly popular in developed countries where Western medicine has long been standard. These treatments, which include acupuncture, homeopathic treatments and natural products, are collectively known in Western countries as complementary and alternative medicine (CAM). The use of CAM therapies has become a significant medical trend in the United States: In 2007, four out of ten adults reported recent use of complementary and alternative medicines; acupuncture and homeopathic treatments were the most popular choices (Barnes, Bloom & Nahin, 2008). In an interview with The Journal of Global Health, Yemeng Chen, L.Ac, FICAE, president of the New York College of Traditional Chinese Medicine, explained that, in some instances, patients prefer to undergo acupuncture for head or body aches rather than take a prescription medication, for fear that the pharmaceutical drug may interact detrimentally with medications that the patient is taking for other conditions. The increase in the number of acupuncture clinics

in the United States and concomitant rise in health insurance policy coverage of CAM clinics indicates increasing acceptance and desire for alternative methods of treatment (Y. Chen, personal communication, February 11, 2012). However, though the popularity of CAM therapies is on the rise in countries like the U.S., CAM is still not considered mainstream or wholly accepted by the scientific community. The evidence supporting the benefits of CAM is growing, but it is not yet nearly as robust as the evidence behind pharmaceutical drugs, and this has made CAM the target of much criticism.

A Sociological Phenomenon: Complementary and Alternative Medicine

At the root of the divide between alternative and Western medicines is a tension between the rising social demand for CAM treatments and the hesitance of the established medical community to integrate CAM into the spheres of medical research and clinical practice. Gerard Bodeker, Ed.D, M.Psych. of the Oxford University Medical School refers to this disparity as a "phenomenon of medical sociology" and points out that "the majority of the world's population practic[es] integrative healthcare, but their health services don't" (Chen, López, Cui, Gambina & Tanavde, 2012).

In South and East Asian countries, integration of traditional medicine systems into modern medical healthcare systems has been in progress for decades (Holliday, 2003). However, in many developed countries like the U.S., CAM therapies continue to face numerous barriers to recognition by the medical establishment, which is skeptical of the admittedly smaller evidence base for CAM therapies in the scientific literature. Nevertheless, the popularity of CAM in the U.S. has made its presence increasingly difficult to brush aside. The National Institutes of Health (NIH), among other research institutions, responded to this rise in popularity with the creation of the National Center for Complementary and Alternative Medicine (NCCAM) in 1991. The NCCAM has established centers for research at American universities on the effects of herbal medicines and acupuncture on pancreatic, autoimmune and Alzheimer's diseases, in addition to many others (NCCAM, 2012). However, critics of CAM, including Marcia Angell of Harvard University and Steven Novella of Yale University, criticize the NCCAM for being "more of an advocates' center" than a research institution (Aronson, 2003). Angell, former editorin-chief of the New England Journal of Medicine, and Novella, who runs the popular blog "Science-Based Medicine," have both



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commented extensively on the need for more scientific evidence on the effects of CAM therapies. While their concerns are undeniably wellfounded, they would do well to acknowledge that medicine is as much about human relations as it is about science. Given the high social demand for CAM therapies in the U.S., it would be medically irresponsible to discourage organizations that aim to uncover the science behind CAM from doing so.

Moreover, as many scientists and medical professionals have continued to view CAM and pharmaceutical medicine as irreconcilable systems of healthcare, the result has been the emergence of a culture of stigma for patients who access CAM therapies in addition to their typical Western medical care. Gerard Bodeker points out that "[one-]half to three-quarters of people who have been taking

some form of a complementary or traditional medicine actually don't tell their doctors [...] they don't want to be criticized or judged" (Chen et al., 2012). It is especially worrisome that the culture of stigma appears to overlap with racial and ethnic categories and exists in both Western and CAM treatment. Notably, though they comprise less than 6% of the U.S. population, Native Americans and Asians account for the majority of CAM use in the U.S. (Humes et al., 2011; Barnes et al., 2008). A 2008 study from the American Psychological Association found that Chinese Americans perceived greater community shame when accessing Western psychiatric services, as opposed to traditional Chinese medicine, for a mental disorder (Yang et al., 2008). The lack of communication and mutual understanding between the CAM and Western medical communities has resulted in a failure to address the varied medical needs of U.S. patients, who ultimately bear the consequences of such shortcomings.

CAM and modern medicine undoubtedly possess disparities in their approaches to wellness; in general terms, the former tends to advocate a holistic approach to treating and preventing illness, whereas the latter targets specific biological factors that lead to conditions of illness or health. However, these characterizations need not be mutually exclusive. Novella's "Science-Based Medicine" blog argues in its mission statement that "all of science describes the same reality, and therefore it must [...] all be mutually compatible" (Science-Based Medicine, 2008). Given the sociological phenomenon of CAM's popularity, it seems clear that there is a need for CAM and western medicine to be mutually compatible, not only on scientific terms, but on cultural terms.

The Challenges of Building an Evidence Base

Unquestionably, there remains a vast body of research that must be undertaken to ascertain the safety and efficacy of many CAM therapies. But, as Dr. Bodeker explains, "It's no longer defensible to say there is no evidence [supporting herbal medicines]. In fact, anybody who says there is no evidence is saying, 'I haven't looked for the evidence.' It's a statement about themselves and their prejudices rather than a statement about the evidence" (Chen et al., 2012). Moreover, as WHO Director-General Dr. Margaret Chan has stated, traditional medicine "needs to be respected and supported as a valuable source of leads for therapeutic advances and the discovery of new classes of drugs" (Chan, 2008). Dr. Bodeker, who heads the WHO-affiliated Research Initiative on Traditional Antimalarial Methods (RITAM), is confident that the active ingredients from traditional medicines have the potential to serve as effective pharmaceuticals. With regard to herbal medicines, he notes that "the vast majority of antimalarials in the past century or two have all come from plants" (Chen et al., 2012). In particular, he cites Cinchona tree bark, used by ancient Peruvian peoples to treat fevers, and the antimalarial drug artemisinin, derived from the Artemesia annua plant used by traditional Chinese healers, as examples of breakthroughs that traditional herbal medicines have brought about in pharmaceuticals research (Chen et al., 2012).

Both Dr. Bodeker and Dr. Chen acknowledge that researching herbal medicines and acupuncture is a difficult and lengthy process, given the challenges of conducting controlled clinical trials on so many types of CAM and traditional medicines. However, it is crucial that researchers conduct falsifiable studies of these treatments in order to determine the most beneficial ones, so that a broader range of healthcare options for both developing and developed nations can be established. Many institutions now recognize that studying all aspects of healthcare procedures is an imperative, as demonstrated by the NCCAM and the World Health Organization's Traditional Medicine Strategy. These organizations, along with RITAM and other institutions around the world, are helping to establish a more concrete evidence base in support of traditional, complementary and alternative medicines. As more evidence accumulates, strategies for regulation and implementation of these treatments at the national and international levels will be more straightforward and less controversial to establish, and at that point the sociological divide between pharmaceuticals and traditional medicines can be minimized.

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