Ethnomedicine

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Chapter 1

What Is Ethnomedicine?

The term ethnomedicine sounds exotic to most people. It implies something other than biomedicine—something more ethnic, less scientific, and more magical. Ethno means race, people, or cultural group. Ethnomedicine is simply the study of the medical systems or healing practices of a cultural group, the cross-cultural comparison of such systems, and increasingly the study of the multiple use of different medical therapies. For medical anthropologists, it also encompasses the domains of individual experience, discourse, knowledge, practice, and meaning; the social, political, and economic relations of health; the ecology of health and illness; and the interpretation of human suffering and health concerns in space and time (Baer et al. 2003, Lock and Scheper-Hughes 1996, McElroy and Townsend 2004, Nichter 1992, Sargent and Johnson 1996, Scheper-Hughes and Lock 1987).

Although the study of ethnomedicine has been the province of medical anthropology, this book is not about medical anthropology and its theories and methods. Rather its purpose is to provide a broad understanding of the basic organizing principles that underlie all medical systems, the full range of theories of disease causation, their geographical distribution, and the historical trends that led to biomedical dominance. It is intended as a primer on ethnomedicine that will illustrate cross-cultural concepts of illness and healing and relate them to our Western, biomedical understanding of disease, curing, and efficacy. Only by understanding this broader picture can we fully understand the nature of healing and the current worldwide trend toward use of multiple medical systems and therapies.

This chapter discusses how ethnomedicine is conceptualized within anthropology and how biomedicine has changed from excluding

to incorporating alternative medicines. Then an outline of the major components of all medical systems is presented to provide the foundation for understanding illness and healing as individual biological and social processes.

ANTHROPOLOGY AND ETHNOMEDICINE

W. H. R. Rivers (1924) launched the study of ethnomedicine in anthropology by treating medical systems as social institutions and suggesting that seemingly implausible curing practices were rational when viewed from the perspective of indigenous disease theories. He also linked ethnomedicine to magic and religion, a stereotype that pervaded the field for half a century. As a result, ethnomedicine began as the study of "beliefs and practices relating to disease which are the products of indigenous cultural development and are not explicitly derived from the conceptual framework of modern medicine" (Hughes 1968, cited in Foster and Anderson 1978:5).

Defining ethnomedicine as what biomedicine is not, however, lumps together a dizzying array of medical systems that vary widely in the extent to which they are codified (have a written tradition), orthodox (accepted as doctrine), legitimate (upheld by law), and effective (usually measured by biomedical standards). Thus, American chiropractic, Traditional Chinese medicine (TCM), and Indian Ayurvedic medicine, all of which have a long history, a written tradition, medical schools, and legal standing in the countries in which they originated, are lumped in the same category with the myriad, largely oral, herbal traditions throughout the world and with spiritual healing traditions, such as faith healing, voodoo, and shamanism. The only thing they all have in common is that they do not use the techniques of biomedicine to heal and they are not based on the scientific materialism that guides biomedicine, namely experiment and statistical validation of assumptions and the breaking down of complex phenomena into component parts (e.g., the various organ systems of the body) each of which is dealt with by itself (scientific reductionism).

Excluding biomedicine from the study of medical systems hindered the ability of anthropologists (and others) to think about and understand how different medical systems effect healing while using widely different techniques and encouraged study of ethnomedical systems as discrete, internally consistent entities. Yet this separation was understandable considering the staggering advances that had been made in medical science in the 20th century (e.g., immunization, antibiotics, anesthesia, genetics), surgical techniques, biomedical technology, and pharmaceutical development and those of public health in

infectious disease control, hygiene, and nutrition. Indeed, in the face of such triumphs, it was easy to forget that "until the beginning of the 19th century all medical practice was what we now call traditional" (Bannerman et al. 1983:11). Until the 1970s, biomedicine was the premiere medical system in the West and was dominant in world health considerations (Basch 1999, Magner 2005, Starr 1982). But, the success of biomedicine in treating the physical body forced it to hive off the psychological, social, spiritual, economic, and political from its purview of interest. Biomedicine focused on the physical body of the individual patient and the physical cause of his/her disease instead, paying little attention to the social context or the lived experience of the patient. This was a significant departure from its historical roots in Greco-Roman medicine, which were much more holistic and intuitive, as were other medical systems as well.

Nevertheless, the spectacular success of biomedicine and the ability of the West to dominate the rest of the world for most of the 20th century, first through colonialism and then through globalization and the domination of world markets and information systems, resulted in the hegemony of biomedicine worldwide (Baer et al. 2003). For almost a century, biomedicine has been the standard to which all other forms of healing have been compared.

Yet, even as the successes of biomedicine were noted, so too were its less spectacular results with chronic and degenerative diseases, which were becoming ever more important worldwide, following on the heels of the demographic transition that resulted in an aging and longer-lived population.[1] The first nail in the coffin of biomedical dominance came in 1978 when the World Health Organization (WHO) made the pivotal decision to include and promote traditional medicine in the delivery of primary health care to the world's populations (Bannerman et al. 1983, World Health Organization 1978). The second nail was the soaring cost of biomedical health care since the1980s. The third nail was the erosion of faith in scientific medicine and increasing interest in other healing traditions spurred by greater access to health information on the Internet and consumers' desire to have more control over medical decision making (Jonas 2000, Fox 1997, Starr 1982). As a result, Western societies began to incorporate alternative healing systems into biomedicine just as non-Western societies had incorporated biomedicine into their traditional healing systems (Bannerman et al. 1983, Basch 1999, Young and Garro 1994/1981).

While these broad social changes were occurring, the discipline of anthropology was changing as well. Anthropologists began to question both the exclusion of biomedicine from the field of ethnomedicine and the dominance of biomedicine itself (Baer et al. 2003, Nichter 1992). Medical anthropology emerged as a distinct subdiscipline defined as "the cross-cultural study of medical systems and . . . the bioecological

and sociocultural factors that influence the incidence of health and disease now and throughout human history" (Foster and Anderson 1978:1). This subtle shift allowed biomedicine, the West's ethnomedicine, to be included within the purview of ethnomedical studies (Hahn 1983). For most medical anthropologists, biomedicine is now considered only one of many medical systems that can be studied, like all the others, as a culturally embedded social institution to which various theoretical perspectives can be applied (Nichter 1992). Interdisciplinary interactions between anthropology, medicine, and public health within the context of national and international health initiatives[2] have fostered new ways of thinking about culture and health that evolved into the current emphasis on the delivery of culturally appropriate health care in nations with increasingly diverse populations.[3]

All of these developments resulted in a sea change for biomedical dominance. Yet, a basic tension between biomedicine and other medical traditions persists everywhere that biomedicine exists. It is undeniable that alternative therapies have become accepted by consumers of medical care in the West. In 1997, 42 percent of Americans used some form of alternative medicine (Eisenberg et al. 1998). In the industrialized countries, 20 to 65 percent of adults have used some kind of nonbiomedical therapy (Ernst 2000). There is also increasing recognition of alternative medicine by the scientific and biomedical communities (Eisenberg et al. 1998, Jonas 2000, Kelner and Wellman 2000, Sharma 1992). The many terms previously used to refer to nonbiomedical healing systems—indigenous, alternative, unorthodox, folk, ethnic, fringe, traditional, unofficial—highlighted their difference from biomedicine and often implied their inferiority (Bannerman et al. 1983, O'Connor 1995, Baer 2001). The current appellation, complementary and alternative medicine (CAM),[4] indicates the profound social changes that have begun to integrate nonbiomedical healing into health care in the West. However, CAM is still defined as what conventional medicine is not, and biomedicine tends to view CAM as separate and subordinate rather than truly integrative (Baer 2004). In addition, not all nonbiomedical therapies are included in CAM and what is included changes over time.

Even though there is still tension between biomedicine and CAM, it is agreed that "complementary and alternative medicine is here to stay. It is no longer an option to ignore it or treat it as something outside the normal processes of science and medicine" (Jonas 2000:xiv–xv). In the 21st century the West has begun a process of the scientifically based integration of CAM into the Western biomedical system. Studies of the efficacy of many CAM therapies are underway and there is already evidence that some CAM therapies are effective.[5] As such studies progress, however, we are wise to remember that there is no scientific evidence for the efficacy of many conventional biomedical therapies (Berman et al. 2000).

MEDICAL SYSTEMS

According to George Foster, all human communities have responded to the threat of disease by developing a medical system, "the pattern of social institutions and cultural traditions that evolves from deliberate behavior to enhance health" (1983:17).[6] All medical systems are an integral part of the culture in which they developed, exist, and continue to evolve, and they cannot be understood apart from the social, religious, economic, and political organization of the societies in which they are found. They have both a cultural (shared modes of perception and behavior) and a social (roles and organization) aspect (Helman 2000, Landy 1977). Thus, medical systems are an integral part of the social organization of a community and they reflect the dominant cultural themes of society. For example, biomedicine in the United States is organized around the scientific methods and principles that underlie our rationalist approach to the world. It is a hierarchical system with physicians and hospital-based medicine at the top of the hierarchy. All other allied health professionals (e.g., nurses, occupational therapists, etc.) and out-of-hospital sources of care (e.g., clinics, rehabilitation centers, etc.) are secondary, however important they are in number and function. They are often subject to decisions made at the top level by physicians and hospital administrators. Except for the military, which has socialized medicine, health care is organized on a capitalist model. Finally, priority is given to the individual and his/her illness rather than the social context of ill health (e.g., family, environment, racism, poverty, etc.) and the role it may play in the causation or exacerbation of illness. In these ways, our medical system reflects our core cultural themes of independence, individualism, scientific positivism, and capitalism. In most, perhaps all, societies the threat of illness plays a powerful role in the moral order, and the threat of illness as an outcome of personal behavior is a powerful motivation to obey moral, social, and environmental norms. In Western culture and its medical system, personal responsibility for health is a paramount theme, and those who "choose" lifestyles that lead to illness are held responsible for those illnesses.

Components of Medical Systems

All medical systems share a set of basic components. Each system has a *theory of disease causation* that explains why people become ill. These causal theories provide the rationale for the treatment and prevention of illness and disease. Thus, all medical systems have both *preventive and curative strategies*. They also have *health care practitioners with specialized knowledge, skills, and training* who are recognized as

healers through certification, examination, initiation, or public recognition. In some medical systems, training is codified (e.g., books, schools, licensing), in others it is informal (e.g., apprenticeship, self-taught, gift from higher powers). Theories of disease causation can range from elaborate, text-based, canons to oral traditions and folk narratives. Healers in all medical systems believe in their ability to heal, as do the people they treat. Attitudes toward healers are often ambivalent, however, because the power to cure implies its converse, the power to harm. Thus, healers often play powerful roles in their communities. Medical systems also *provide an organizational system for caring for the ill* that usually includes special places people go when they are sick, rules for interacting with healers, and defined roles for both patient and healer. Finally, there is a *system for paying the healer* for his or her services. Payment can be either monetary or in-kind (e.g., exchange of goods and services).

Sectors of Health Care

In complex societies, it is useful to think of medical systems in terms of three sectors of health care (Helman 2000, Kleinman 1980)—the popular sector, the professional sector, and the folk sector. The *popular sector* is nonprofessional. It includes the individual and his/her social network—family, friends, neighbors, coworkers, church communities, self-help groups, and discussions with people who have special experience with a particular health problem (e.g., an uncle who has diabetes or a grandmother who knows herbal remedies for children's stomach upsets). The popular sector is where illness is first recognized and where the quest for treatment begins. Within the family, women are usually the primary providers of health care for both children and adults. Treatment includes self-medication, over-the-counter medications, herbal remedies, and other nonprofessional healing therapies (e.g., diet, lifestyle change, spiritual). Prevention consists of maintaining culturally agreed upon guidelines for health maintenance with respect to lifestyle (e.g., diet, exercise, sleep, dress, work, and good conduct). Worldwide it is estimated that 70 to 90 percent of all health care takes place in this sector (Helman 2000, Kleinman et al. 1978). This sector is the least organized of the three and lacks some of the components of an organized medical system, most notably training and payment of providers; yet the way care is managed in this sector reflects the dominant theories of disease causation and treatment in a society, and it is the point of origin for health seeking behavior in the professional and folk sectors, both of which exhibit all the components of a medical system.

The *professional sector* includes the organized, legal healing professions (e.g., physicians, dentists) and recognized paramedical professions (e.g., nurses, physical therapists, chiropractors, etc.) in a

society—for example, biomedicine and osteopathy in United States; Ayurvedic, Unani, and biomedicine in India; and Traditional Chinese medicine and biomedicine in China. The professional sector is also home to some of the healing strategies that are subordinate but complementary to biomedicine such as acupuncture and homeopathy in the United States. Biomedicine is firmly established throughout most of the world today, due in large part to the work of the World Health Organization and to the continued support of biomedicine in unilateral and multilateral aid programs from the developed to the less-developed countries, as well as the general dominance of Western economies and technologies in the world. However, access to biomedical care is uneven in less-developed countries, often existing only in urban areas. This has been exacerbated by the soaring cost of biomedical care over the last three decades that has been propelled by the development of expensive technologies, therapies, and pharmaceuticals. Today, biomedical care is financially out of reach for most people in the less-developed countries and for many people in the developed countries as well (e.g., the 45 million Americans, 15.6% of the population, without health insurance [DeNavas-Walt et al. 2005]). The increasing cost of biomedicine and the realization that biomedical services would probably never be available on a routine basis to most of the world' s population led to the change in policy at WHO to focus on primary health care and to promote both biomedicine and traditional medicine.

The *folk sector* includes both sacred and secular healers who are not part of the professional medical system. These healers are more specialized than individuals in the popular sector, but they are usually not recognized by the professional sector. Thus, they operate between the popular and professional sectors of health care. There are many kinds of folk healers, and they range from healers who have secular, technical expertise like lay midwives, bonesetters, and herbalists who are found in most societies of the world to more specialized spiritual healers (e.g., shamans, witches, faith healers) whose presence may be less widespread (Foster 1983). Their selection and training come from one or more of the following paths: inheritance (born into a family of healers), revelation (discovering a gift of healing), apprenticeship to another healer, and self-teaching. These healers are usually part of the communities in which they live and share the same basic cultural values as others in their community. Their healing techniques often involve a more holistic approach that restores social, environmental, and spiritual harmony as well as alleviation of illness for the individual. The folk sector has been the traditional object of ethnomedical study for anthropologists, although studies of the other two sectors are now extensive. It is also home to the healing traditions encompassed by CAM and to the many other indigenous healing systems that are not included in CAM but form part of what WHO calls traditional medicine.

Patients access and use these three sectors of health care in different ways. When a person feels sick or out of sorts, care is usually sought in the popular sector first. Often this is the only sector used for the many acute but non-life-threatening illnesses to which human beings fall victim. Indeed, the "80% Rule" tells us that four out of five people who seek medical care get better regardless of their treatment actions, indicating the powerful and natural tendency of the body to heal itself (Jonas 2000, Macdonald 2005, Thomas 1994). A person with a cold, for example, will be treated with home remedies (e.g., herbal tea, chicken soup, orange juice, rest) and perhaps some over-the-counter medications and herbal medicines (e.g., Tylenol, cough syrup, Echinacea). If home treatment fails to alleviate the complaint, however, and the illness is perceived to be worsening or more serious than first thought, some kind of professional advice will be sought and the patient will try another sector. For example, the cold may turn into bronchitis and the patient or his/her caregiver might seek biomedical care in the professional sector where the patient will be diagnosed and provided with antibiotics to cure the bronchial infection. Simultaneously, care might be sought in the folk sector for spiritual needs, and this is especially true when the illness becomes serious. If the patient's condition worsens to pneumonia and he/she has to be hospitalized, the family or a wider set of significant others—the sufferer's "therapy management group" (Janzen 1978)—might activate a prayer circle from their church to send healing energy to the patient. Alternatively, help might be sought in the folk sector from another kind of spiritual healer who can divine why the person has become sick and who can intervene in the spiritual world to put things right, or from a CAM provider, perhaps an acupuncturist who will assess the best points to needle to alleviate the lung congestion associated with bronchitis or pneumonia. As the professional and/or folk sectors are accessed, of course, the patient is likely to continue self-care initiated in the popular sector.

As this example shows, the different sectors of care can be used exclusively, sequentially, simultaneously, or repeatedly. There is rarely any coordination among health care providers when patients use multiple sectors, and healers from any sector often operate without knowledge of the other therapies that their patients might be using. This is especially true in the West where 72 percent of patients who use CAM do not tell their physician they do so (Eisenberg et al. 1998). The potential dangers of multiple therapies and medications for the patient have been cited repeatedly as a serious risk of CAM use by Western patients. Since health care is initiated and coordinated by the individual patient, the three sectors of care may only overlap at the level of the individual patient, resulting in a unique health care seeking and therapeutic trajectory for each patient.

HEALTH: DISEASE AND CURING, ILLNESS AND HEALING

As the old saying goes, "In this world nothing is certain but death and taxes." (Benjamin Franklin). To these I would add disease, injury, and accidents. None of us gets through life without at least a minor bout with illness (colds, flu), injury (cut finger, stubbed toe), and accident (falls, bumped head), and many, perhaps most of us, must face serious illness (heart disease, cancer, diabetes), injury (trauma), or accident (automobile, sports, or work related). If we are lucky enough to escape ourselves, we often become caregivers for others who are afflicted—our children, partners, siblings, friends, parents, grandparents, and others. Thus, *disease* and *illness* affect us all, but what do we really mean by these words? What do we mean by health?

According to Blaxter (2004) the medical model regards health as the absence of disease and the normal functioning of the body. The social model of health, however, suggests that health is something more than just the absence of disease or physical and mental impairment. Health implies a sense of wholeness, wellness, and well-being captured in the 1948 WHO definition: "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (p. 19).

In the West, we have come to use the terms disease/curing and illness/healing in related but different ways. Disease is the medically defined, objective pathology afflicting the patient (e.g., malaria, cancer, PTSD). Sickness is the social manifestation of the body's physical reaction to a disease (e.g., fever, pain, rashes) that entitles the person to take on the socially defined sick role (Parsons 1951).[7] Illness is the subjective experience of disease, sickness, or simply feeling that something is not right whether or not there is a diagnosis of disease (Eisenberg 1977, Hahn and Kleinman 1983, Kleinman 1980, Young 1982). Thus, as these terms are used technically in the health and social sciences, people can be sick (diagnosed with disease or risk factors for future disease such as hypertension or pre-diabetes) without being ill, and they can be ill (feel that something is wrong with them) without being sick. While most diseases and the symptoms and bodily processes they cause are thought to be relatively consistent across the individual biological bodies they afflict,[8] illness can be interpreted and reinterpreted by the individual, his/her family, and the wider community over time.

Just as we have set up a dichotomy between the objective reality of disease and the subjective experience of illness, we use the words curing to refer to the removal or correction of organic pathology and healing to refer to the broader experience of the restoration of physical, mental, emotional, social, and spiritual health (McGuire 1988,

O'Connor 1995). Just as we can have disease without illness and illness without disease, we can have curing without healing and healing without curing. A person afflicted with inoperable cancer can be healed if s/he comes to terms with her/his disease and *feels* a sense of peace and acceptance. Some AIDS patients, for example, report feeling far better after being diagnosed than before when they felt their lives were out of control and they lacked direction (Mosack et al. 2005). Alternatively, a woman recovering from knife wounds inflicted by her partner during a domestic violence incident can be cured in her body, but may never feel truly healed.

Disease/illness and curing/healing, of course, represent the classic Western body/mind dualism that pervades our notions of health. Biomedicine tends to focus on the physical, bodily problems of its patients, and thus, effecting a cure and/or maximizing physical function are the primary measures of success. To understand illness and healing, however, we must go beyond the physical body and understand these processes from the patient's perspective. Many indigenous, traditional, and CAM therapies are theoretically attuned to the broader notion of health that is implied in the term *healing*. For this reason they appeal to patients seeking a more philosophical or cosmological answer to the questions: Why me? Why now? What did I do to deserve this? How can I restore my health?

CONCLUSION

When faced with disease or illness, people turn to their medical system for help. Although the theories of disease causation and treatment strategies vary across different medical systems and often contradict one another, the goal of all medical systems is to provide people with a coherent way to understand their illness, a plan to restore their health, and a means to reintegrate them as functioning members of their communities.

In the following chapters we will explore the range of theories of disease causation that are known from biomedical and nonbiomedical systems. Chapter 2 contains an overview of human subsistence systems and how they have shaped health and disease; a discussion of the great medical traditions of ancient Greece, Rome, and Persia and their contribution to the development of biomedicine in the West; as well as the great medical traditions of India (Ayurvedic medicine), China (Traditional Chinese medicine), and Islamic medicine, all three of which, along with biomedicine, form the four major medical systems of the world today. These four medical traditions have affected local ethnomedical systems and each other over space and time just as they influence each

other today. Chapter 3 contains a discussion of the range of theories of disease causation from complementary and alternative medicines that are not part of the great medical traditions. Chapter 4 looks at the geographical distribution of generalized patterns of theories of disease causation that tend to characterize the medical systems of broad cultural areas. The final chapter turns to a discussion of globalization, medical pluralism, and the search for healing in a complex world.

Knowledge of the basic tenets of the great medical traditions and the range of ethnomedical theory and practice beyond these great traditions provides the foundation that is essential for understanding why healing can and does occur within many, indeed probably all, medical systems. Knowledge of the broad cultural patterning of theories of disease causation provides a foundation for understanding the main issues involved in the provision of culturally appropriate health care. Finally, grounding the search for health and healing in the context of globalization allows us to understand the trend toward medical pluralism within an increasingly capitalist-driven, individualistic world medical system.

Notes

[1] This change in primary cause of morbidity and mortality from infectious to chronic diseases is known as the epidemiological transition (Omran 1971).

[2] The World Health Organization (WHO) has been instrumental in the worldwide spread of biomedicine since World War II to improve health in the developing countries.

[3] For more information, see the Office of Minority Health web page, http://www.omhrc.gov/clas/

[4] The National Center for Complementary and Alternative Medicine (NCCAM) in Washington, D.C. uses CAM as the official term for "a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine." Complementary medicine is used with conventional medicine and alternative medicine is used instead of it.

[5] For example see Koenig et al. 1999, Lewis and Elvin-Lewis 2003, Sierpina and Frenkel 2005, and the more generally the *Journal of Scientific Review of Alternative Medicine*, http://www.sram.org/ (accessed 9/17/07).

[6] Foster is quoting from F. L. Dunn, "Traditional; Asian Medicine and Cosmopolitan Medicine as Adaptive Systems," in C. Leslie (ed.), *Asian Medical Systems* (Berkeley: University of California Press, 1976), p. 135.

[7] Sick people are treated differently than those who are well. They are temporarily released from their responsibilities (e.g., school, work) and are taken care of by others, but they are also expected to work toward getting well.

[8] Some diseases, especially syndromes like AIDS, Lyme disease, and Posttraumatic Stress Disorder, however, can manifest differently. AIDS, for example, presents differently in men and women, and individual bodies often have unique reactions to pharmaceuticals.