Diversity in the Context of Health and Illness

Cheryl Mwaria

Nowhere can issues of biocultural diversity and change be addressed as clearly in the curriculum as they can be in medical anthropology, for there is a long-held axiom in the subdiscipline that concepts of health and disease are intrinsic to every culture and are, therefore, variable. Medical anthropology is concerned with the myriad factors contributing to disease, that is, the etiology of disease, and the varied ways in which human populations respond behaviorally to disease (clinical manifestations) and illness (the sufferer’s experience). These responses, taken together, form a society’s medical system (the beliefs and practices directed toward the alleviation of disease and illness and the promotion of health). It is not only the assumptions concerning health and disease that are culturally based but the very language we use and the questions we raise that are culturally driven as well. The United States as a genetically and culturally diverse society provides a fertile background for examining empirical evidence pertaining to genetic, environmental, ethical, and access issues relating to health and disease. This chapter discusses the ways in which medical anthropology as a fundamental component of the curriculum can be used to examine diversity with respect to these issues and challenge some previously held curricular assumptions along the way.

Medical anthropology is one of the newest subdisciplines in anthropology, but it has clearly experienced spectacular growth, particularly over the last two decades. Prior to 1960, as David Landy (1977:5) has asserted, “not a single book in anthropology has been devoted to the topic as a theoretical concern”: that is, with the exception of Rivers’ (1927) theoretical classic, Medicine, Magic, and Religion. Today, in addition to Alland’s (1970) pioneering and considerably influential Adaptation in Cultural Evolution: An Approach to Medical Anthropology, and Landy’s own classic anthology, Culture, Disease, and Healing: Studies in Medical Anthropology (1977), there have been a growing number of textbooks in the genre including: Foster and Anderson’s Medical Anthropology (1978); Wood’s (1979) Human Sickness and Health: A Biocultural View; McBride and Townsend’s (1979, 1989) Medical Anthropology in Ecological Perspective; Moore et al.’s The Biocultural Basis of Health: Expanding Views of Medical Anthropology; Helman’s (1994) Culture, Health and Illness: An

Taken together, the theoretical perspectives of these texts vary, with an emphasis perhaps on an ecological paradigm, that is, the examination of health and disease in an environmental context and with it, the concept of adaptation. According to McElroy and Townsend (1989:5): “Medical ecology is concerned with one basic question. . . . How do these people survive in this particular environment? How do they cope with disease? And how do they solve problems that affect their health?” There have been, however, alternative perspectives including a cognitive or “meaning-centered” paradigm and a critical paradigm. Singer (1996:497), as a proponent of the latter perspective, argues that medical ecological approaches can be faulted for failing to appreciate the fact that “it is not merely the idea of nature – the way [external reality] is conceived and related to by humans – but also the very physical shape of nature, including the course of human biology, that has been deeply influenced by an evolutionary history of hierarchical social structures – that is to say, by the changing political economy of human society.”

Critical medical anthropological raises, therefore, a different set of questions (Baer et al. 1997:230): “Whose social realities and interests (e.g. which social class, gender, or ethnic group) do particular cultural conceptions express, and under what set of historic conditions do they arise?” Such questions are vital to an understanding of patterns of health, disease, and illness as they appear in the varied populations comprising the United States, if for no other reason than that the persistent practice of the medicalization of difference in public policy has had a very real effect on patterns of health, disease and illness in the country. This is not to say that critical medical anthropology can ignore biology; it cannot and does not. For example, a critical medical anthropology perspective can elucidate the relationship between biology and social structure with relation to resource allocation, for two emergent and pivotal health problems confronting our species in the new millennium: the return of infectious disease with increasing virulence; and providing a safe food supply. The reemergence of increasingly virulent infectious disease is a large extent the product of the misuse of antibiotics and a poor understanding of evolutionary principles. It is also the consequence of the destruction of forest environments, thereby bringing humans into contact with new pathogens (Garrett 1994; Ewald 1996). The threat to our food supply is the result of contamination due to factory farming methods here, and the importation of food from countries forced to use contaminated water sources.

Each of these problems is a product of human decision making, but given the global interconnectedness of all societies, decisions made in one country may well affect people in another. We must expand explanations of disease patterns to incorporate both fundamental principles of evolution and the very real role that differentials of power and perspective play with respect to these patterns. Acknowledging such linkages must be the starting point for curricular change.

The Significance of Genetic Issues versus the Insignificance of Race

In order to understand the complex interplay between political, cultural, and biological factors as they affect health and the spread of disease in diverse populations of the United States, we must first confront the paradox concerning the concept of race. It is simply true that the use of the term is linguistically pervasive in our society, the scientific and popular definitions are clearly at odds. Moreover, upon a more detailed analysis, there is no consensus on the definition of the term. This has resulted in the abandonment of the use of the term in many contemporary textbooks, or at best the assertion that because of a lack of consensus, the term itself is invalid. At best such an approach is both confusing and misleading. At worst, it leaves students with the inevitable ridiculous conclusion that there are no biological differences between human populations. Students should first be presented with some theoretical insights focusing on an explanation of the mechanisms governing biological variation. These include at least a rudimentary understanding of evolution with respect to the following concepts: genes, proteins, gene pools, gene frequencies, and continuous versus discontinuous variation. There are two formidable obstacles to such a discourse.

First, anthropology, like the vast majority of academic disciplines, in the face of a growing amount of both theoretical and empirical evidence, has become increasingly fragmented. As Mukhopadhyay and Moses (1997:525–526) have asserted: “we think it is time to consider relinking the cultural and the biological, but within a radically different paradigm. This paradigm would situate human biodiversity within a sociocultural framework, in effect reuniting culture and biology by embedding biology in society and culture.” The end result of this fragmentation has been that specialists in the various subdisciplines are increasingly unfamiliar with developments or, at times, lack even a basic grasp of concepts outside their own areas of specialization. This, in and of itself, has often led to a conflation of terms and consequent misunderstandings. The concept of race typifies this.

Second, students, faced with a rapidly increasing body of knowledge to master, often resist requirements that they feel are beyond the scope of their interests. Thus learning basic genetic concepts is often viewed as irrelevant.

Once students grasp these basic genetic concepts they can comprehend the biological concept of race defined by Bruce (1977:1) as “a division of a species that differs from other divisions by the frequency with which certain hereditary traits appear among its members.” As such it has two characteristic: (1) it is a group of populations that share some biological characteristics; and (2) these populations differ from other populations according to these characteristics, or more specifically according to the gene frequencies governing these characteristics. Armed with these insights, one can understand the problems of applying the biological concept of race to our species Homo sapiens sapiens.

What then are the problems with applying the biological concept of race to our species? They can be summarized as follows. There has never been a con-
sensus on the number of "races." This is a by-product of the arbitrary choice of phenotypic (observable) characteristics used to define human populations. Moreover, those characteristics that have been chosen, skin color, hair type, hair color, the shape of the nose, eye, or head are continuously variable traits and therefore do not allow for the division of the species into discrete units. Indeed similarities in these characteristics do not necessarily denote common ancestry. In order to be useful, such traits would also need to correspond. That is, the classification would have to work for a number of independent traits. Therefore, classification developed from one trait would also have to show the same pattern in other traits. This is clearly not the case. Finally, racial classification is regarded as discrete. It represents a form of typological thinking and therefore ignores variation within groups. In other words, it ignores Mendel's work on independent assortment. It is for these reasons that physical anthropologists and indeed most biologists do not find the large-scale categories known as "races" useful when employed to differentiate between human populations. This does not mean, however, that human populations cannot be compared on the basis of gene frequencies. Nor does it mean that it is never useful to do so. Such comparisons, and indeed any explanation of human biological variation, are better analyzed by focusing on micro evolutionary forces using individuals or local populations as the unit of analysis. This is particularly true when comparing rates of disease between various populations in the United States. In so doing one does not have to "throw the baby out with the bath water" by arguing that human variation either does not exist or is solely the product of social forces. We are, as biological beings, still subject to evolutionary forces. Nevertheless, with humans culture overwrites biology as the critical arena of variation.

Cultural differences, too, continue to be confused with biological diversity in group labeling. Linguistic ability and social behavior are often used to categorize people into groups. For instance, in the United States, the term "Latino" (formerly, Hispanic) is used to lump together peoples as diverse as recent immigrants from South America and those U.S. citizens who are descendants of Native Americans and colonists of the Southwest, California, and Central America. While the overall category may serve political purposes, it obscures cultural diversity and population ancestry alike. Students should be informed about basic anthropological insights into group formation: that is, that people form groups on the basis of perceived shared interests. While such interests are often based on responses to exclusion from power by elite groups, there is nothing essential about them. Indeed, they are subject to historical change as are gene frequencies in biological populations. Such labels are also used carelessly, not only by the lay public, but by the U.S. government in collecting vital statistics, particularly with respect to data on disease incidence. Consider the following example. When collecting infant mortality statistics, race or ethnicity of infants of "mixed" parenage are recorded according to the following rules: (1) if one parent is white, the fetus or infant is assigned to the other parent's race; (2) when neither parent is white, the fetus or infant is assigned to the father's race (Monthly Vital Statistics, supplement 1989, cited in Molnar 1998:3132). This is clearly a reflection of the historical practice of restricting elite status by assigning such children to the politically disadvantaged group. In so doing it suggests that physical and behavioral traits come only from that group. The term "race" was replaced by "ethnic group" in the 1980 census, but this self-classification, while potentially useful for political purposes, reveals almost nothing about the range of biological variation. Recognizing "race" as a social construct, we should be concerned, not with "racial" differences with respect to incidence of disease, but with (1) biological responses to the environment; (2) behavior directing gene flow between generations; (3) population size or isolation as factors influencing variation among generations and among populations; and (4) issues of access both to quality health care and "healthy" environments.

Given these considerations, we must acknowledge that there are a number of both congenital abnormalities and genetic diseases that occur more frequently in some populations than in others. A closer look at three of them, Tay-Sachs disease, cystic fibrosis (CF), and sickle cell anemia (SCD, or sickle cell disease), demonstrates the enormous variability down to the level of the individual's nuclear DNA polymorphisms that can be found in populations in the United States. More importantly, these diseases illustrate the ways in which comparisons of populations must take into account not only genetics, but anthropological explanations of population structures and gene flow.

If we look at rates of Tay-Sachs among the Ashkenazic Jewish populations in the United States, we see that it occurs once in every 2,500 births as compared to 1 in 500,000 non-Ashkenazic births (Ladman et al. 1986). This means that one in 25 persons in the Jewish population are carriers, but show no signs of the disease. Tay-Sachs disease causes an interruption of the regulatory process maintaining a balance of gangliosides in cell cytoplasm. The interruption leads to an accumulation of excess gangliosides in the neuronal cells, causing the brain to become swollen and distended. Infants with the condition have severely impaired brain function and fail to develop normal neurological responses, resulting in loss of muscle control followed by paralysis, and loss of hearing and sight by the end of the first year. The victims of Tay-Sachs disease lack hexosaminidase A (Hex A) because of their inheritance of the recessive allele producing this enzyme, and are therefore unable to metabolize ganglioside molecules normally. While the genetic and physiological properties of the disease are well known, the question of why this disease has persisted at such high frequencies remains and requires an anthropological explanation. Initially, the most promising hypothesis explaining the persistence of the disease was related to the size and relative isolation of the ancestral Ashkenazic Jewish population. The ancestral population was small, numbering between 1,000 and 5,000 people who migrated from the Middle East about 1,000 years ago. Such a numerically small population, accompanied by generations of endogamy, which was a religious prescription, and isolation, socially reinforced by patterns of discrimination, would allow for an extreme form of genetic drift known as the Founders Effect. There is, however, an even more promising hypothesis, given the discovery of two abnormal Hex A alleles: selection favoring the heterozygote. Its proponents (Chakravarti and Chakraborty 1978) argue that the crowded ghetto environments, in which Ashkenazic Jews were forced to live in Eastern Europe,
fostered endemic cystoid and tuberculosis at high levels. These diseases acting as selective forces may have favored carriers of the Hex A deficient allele, who had lower mortality rates, survived longer, and had higher fertility rates offsetting the loss of Tay-Sachs infants. High rates of endogamy and relatively high fertility rates continued to characterize migrants from the Eastern European populations who settled in the United States until recently. If present patterns of exogamy and lowered fertility continue or grow, we would expect to see a lower rate of Tay-Sachs in the United States.

Cystic fibrosis (CF), inherited as an autosomal recessive, is the most common lethal genetic disease in European-derived populations in the United States. The disease prevalence ranges from 1 in 1000 to 1 in 3,800 births in those of European ancestry as compared to the extremely low 1 in 17,000 for those of African descent and even lower 1 in 90,000 births among Asians in Hawaii. Weiss (1993) gives an overall rate of carrier frequency for those of European descent in the States of 1 in 20. Cystic fibrosis is a disease of the exocrine glands and as such produces secretions of thick viscous substances that damage the lungs and pancreas. Patients suffer respiratory and digestive problems which before 1950 generally resulted in death in infancy. Today, survival rates have improved in the United States, but generally hover around 24 years. Genetic research has improved understanding of the physiology of the disease and led to the identification of 24 different mutations, but just as with Tay-Sachs, the persistence of high frequencies of the recessive alleles in certain populations raises questions as to why such frequencies are maintained. This is particularly intriguing given that homozygous recessives died before the age of reproduction until quite recently, and those that survive now have very low fertility rates. As Francis Collins (1992:774), director of the Human Genome Project, suggests: "there may have been some heterozygote selection or a very strong founder effect for this population." According to some researchers (see Neel, 1987), just such a selective force may have been in the correlation of CF with tuberculosis. Tuberculosis (TB, or "consumption") appeared with epidemic force in England just as the Industrial Revolution emerged and with it the concentration of Northern Europeans in urban centers. Poverty, inadequate nutrition, and crowded, squalid, unventilated housing combined to facilitate the spread of tuberculosis, the "white plague," and with it CF, on to the Continent. Given massive immigration from Europe to the United States, by the late 19th century it was a major cause of death on both sides of the Atlantic. Anything providing resistance to TB would allow its carriers to live longer and renounce a higher rate of reproduction. Carriers of the CF allele in this type of environment would have such an advantage in that the viscous secretions produced in the heterozygote contain mucopolysaccharides that facilitate the rapid repair of cellular tissue damage caused by TB.

For my last example of the linkage between sociocultural factors and the persistence of polymorphisms in the United States, let us turn our attention to sickle cell disease (SCD). This is acquired through the inheritance of homozygous recessive alleles that produce only hemoglobin molecules with the valine substitution in the beta chain. This relatively simple change in amino acid sequencing results in the deformation in shape of hemoglobin cells when oxygen is taken up in the surrounding tissues. People who inherit SS hemoglobin may survive without clinical symptoms, depending on the rate of oxygen consumption, for long periods. An increased demand for oxygen, however, such as is caused by strenuous exercise, may lead to a crisis involving the distortion and red cell destruction, and many other problems resulting in high mortality rates. In the United States, the frequency of the Hb gene in the African American population, numbering 33 million, averages about 8 percent. Of these, about 10 percent are carriers, that is, heterozygotes (AS genotypes) whose clinical symptoms, though serious, have much lower mortality rates.

Medical anthropologists and biologists agree that it is difficult to demonstrate natural selection in humans. Indeed, there is little direct evidence of superior fitness of heterozygotes for any polymorphisms and it is difficult to test hypotheses of phenotype fitness in specific environments such as the relative immunity of human heterozygote carriers to a particular disease (Mohr 1998:144). There is, however, more complete evidence for disease selection by human hemoglobin variants in malarial environments. Two classic studies pertaining to sickle cell disease provide such evidence. In the 1940s Linus Pauling (Pauling et al. 1949) demonstrated the molecular differences of hemoglobin of people with sickle cell disease whose variants are transmitted between generations according to Mendelian laws. Since then hundreds of hemoglobin variants have been detected. A decade later, Frank Livingstone (1938) demonstrated that malaria became endemic in sub-Saharan Africa about 2 thousand years ago when Bantu peoples, having acquired iron box technology, established horticultural villages in tropical rain forest habitats, thereby facilitating the spread of malaria-bearing mosquitoes. The disease malaria is caused by several species of Plasmodium, including the one causing the deadly malaria falciparum, transmitted through the bite of the Anopheles mosquito. The Anopheles gambiae mosquito is best adapted to the conditions created through human habitation in tropical rain forests, open sunlit garden plots, village clearings, and stagnant water. Under these conditions, any degree of immunity conferred by genotype would enhance survival and reproduction. Studies show that red blood cells containing certain types of abnormal hemoglobin, those that are more fragile with a shorter life span and lower energy level, are less able to support malarial parasite growth. Such is the case with people who have sickle cell trait (SCT), that is, those who are heterozygous for the gene. They have longer life spans, higher live birth rates and lower parasite counts than those with normal hemoglobin in the areas where malaria falciparum is endemic (Mohr 1998:138). The distribution of the S allele and malaria seems to support this argument. The S allele is found with appreciable frequencies in Africa, the Mediterranean, Saudi Arabia, India, and the Americas, with the greatest frequencies in central Africa, northeast India, Arabia, and Greece (Erhardt 1973; Livingstone 1985; Mohr 1998; and Schroeder and Munger 1990). Thus the hypothesis that the concordant distributions of gene and disease are the result of natural selection has been supported by evidence for differential
fitness of the AS heterozygote in malarial environments as well as the distribution of the S allele and malaria (Molnar 1998:158).

Thus far our discussion of sickle cell trait has been from the perspective of medical ecology. If we are truly to understand the impact of the frequency of this trait among African Americans living in the United States we must take our discussion to another level, as would be required from the perspective of critical medical anthropology. Edelstein (1986) has argued that in the heterozygote (AS), red blood cells function normally under most circumstances, rarely sickling. However, in the United States, where about 10 percent of African Americans are carriers, there has been considerable confusion over the relative health risks faced by heterozygous (AS) individuals versus homozygous (AA) normals, resulting in loss of jobs in lucrative and prestigious fields. Sickle cell trait carriers were believed to be at high risk when exercising heavily, working at high altitudes; flying planes was considered beyond their capabilities. As Molnar (1998) points out: “Throughout the 1970s the Navy tested recruits and nearly all officers coming on duty for sickle cell trait. Army personnel were also screened but only those applying for airborne duties were examined.” Major commercial airlines also joined this confusion by grounding or even firing personnel with SCT (Bowman 1977). Such misunderstanding has been grounds for rejection of African Americans with SCT from the Air Force, and was the cause of at least one forced resignation from the Air Force Academy in Colorado Springs (see Duster 1990). By 1981 the ban on cadets with SCT was ended but several major corporations have continued to test prospective employees (see Kevles 1995).

Though this issue has faded from public attention, groundless fears over blood transfusions and the confusion of SCT with SCD persist. Furthermore, there remains confusion over just who can acquire SCT, even within the medical community itself. The Journal of the American Medical Association reported an inquiry as to whether they had no immunities, and thereby radically altered the environment. Biologist Paul Ewald’s (1994) seminal work on the evolution of virulence suggests that human behavior appears to influence whether pathogens evolve into benign or harmful forms, in that “it often determines the route and timing of transmission” (Ewald 1991:86). This seems to have been the case with respect to the introduction of Old World pathogens into the New World. As historian James Merrell (1989:237) stated: “Old World pathogens served as the shock troops of the European invasion, softening up the enemy before battle.” These “virgin soil” epidemics were so devastating that they killed their hosts before the newly arrived, uninvited guests had even left their vessels, as in 1616 when a ship-borne plague killed Indians living in New England’s coastal villages. The Indians “died in heaps, as they lay in their houses.” Many Europeans saw the “hand of God” at work, presaging the devastation that was to come to indigenous populations at their hands. Disease alone was not responsible for the devastation of indigenous populations; the social and economic disruption brought about through patterns of warfare and persistent racism and discrimination all took their toll. According to Kraut (1994:17–18): “Survivors often merged with remnants of other tribes, further diluting tribal rituals and lines of authority. Every merger
required a process of assimilation not unlike that which characterizes patterns of international migration.

Nor was it only Native Americans who faced the ravages of disease as a result of the environmental changes wrought by immigration. African slaves and European immigrants themselves all suffered from the effects of New World pathogens and brought with them new pathogens from the Old World. In the case of the slaves, ship-borne disease sometimes killed as many as 25 percent of the passengers before arrival in the Americas. Those that survived faced the cruelty and degradation of slavery and its extraordinary rates of infant mortality, which was twice that of whites in 1850, the same ratio that characterized Washington D.C. some 130 years later. As Jacqueline Jones (1985:35–36) has noted, “fewer than two out of three black children survived to the age of ten in the years between 1830 and 1860; the life expectancy at birth for males and females was only 32.6 and 33.6 years respectively.” Actual rates of morbidity and mortality among the slaves are difficult to come by, but there is no shortage of “medical” treatises associating blackness with illness. This “medicalization” of difference can be seen in the leading medical literature of the time. Sander Colman (1985:138) noted that as late as 1831 the American Journal of Insanity published an article, based on the inaccurate census of 1840, that declared:

It is obvious, however...that there is an awful prevalence of idiocy and insanity among free blacks over free whites, and especially over slaves. Who would believe, without the fact in black and white, before his eyes, that every fourteenth colored person in the State of Maine is an idiot or a lunatic?

That same year (1831) saw the publication of Samuel Cartwright’s article in the New Orleans Medical and Surgical Journal which not only equated blackness with madness, but also described a number of psychopathological diseases purported to appear only among blacks, the most notable being “dreaded mania” – a disease causing slaves to run away – and “dysaesthesia” – better known as “crazality” or resistance to work.

As for early European immigrants to the United States, they, like the slaves, often experienced horrific mortality rates on board ship, and as they were clustered into crowded, unsanitary urban ghettos or compelled to work under extremely hazardous conditions. Allen Kraut (1994:2) in his insightful book documenting the immigrant experience, Silent Travelers, speaks of the “double helix of health and fear” characterizing the intersection of American public health policy and immigration, arguing:

Just as continual replenishment of the American population through immigration has shaped the politics, economics, and culture of American society, ethnic placemaking has defined American medical culture and its approach to public health. Medicine has been an important instrument employed by native-born Americans to assimilate immigrants into American society in a manner that would most effectively preserve the established order's cultural preferences and priorities. Immigrants have engaged in a love/hate relationship with America's public health priorities, at times resisting them as an unwelcome intrusion in their lives and at other times embracing them as a path to upward mobility.

Nor were their experiences uniform. When disease suspected to have been brought by immigrants broke out, public health officials, bolstered by the native-born populace, sometimes quarantined entire ethnic communities regardless of any given individual's exposure to the disease. Such was the case in San Francisco at the beginning of the 20th century when bubonic plague struck a Chinese immigrant, Chick Gin. Chinese immigrants lacked the protection of citizenship as a result of immigration policy, and so the entire community experienced the full force of racist and nativistic policies which literally sealed off their community in quarantine. Their experience, however, is in sharp contrast to that of the Irish, and the defiant Mary Mallone, who as “Typhoid Mary” remained clinically free of symptoms, but spread typhus to at least 53 known individuals, some even after she had been warned of her infectious state. The Irish were fairly well established politically by 1906, the time of the first outbreak traced to Mary, and she was able to gain enough sympathy and support to be released from custody with assurances that she “know how to take care of herself.” Unfortunately, the defiant Mary continued in her trade as cook, infecting at least 20 more people. Despite this she continued to be viewed as an innocent victim.

The United States saw substantial and significant shifts in its economic base as it moved from an agrarian society to an industrialized giant, followed by a retreat from manufacturing. Each of these periods was accompanied by massive shifts in labor organization and environmental changes that have had a significant impact on rates of disease and injury in diverse segments of the population. Consider the following: farm labor is today the most hazardous and lowest paid type of work. Skin cancers, resulting from overexposure to the sun, are prevalent. Even more hazardous and lethal are the effects of exposure to chemicals and pesticides (there are currently some 45,000 sold in the States), including leukemia, lymph node cancer, multiple myeloma (bone cancer), brain cancer, birth defects, spontaneous abortion, sterility, amenorrhea, liver and kidney dysfunction, nervous system disorders, anxiety, depression, and immunological abnormalities, that frequently accompany farm work. As a result, most jobs in this sector have been left to immigrant and migrant laborers. Over 90 percent of them are Latinos from various parts of Central America, and the rest are Mexican Americans, Native Americans, African Americans, and Southeast Asians. Migrant laborers often fail to seek medical help when it is needed because of fear of job loss, lack of knowledge about their rights as workers, lack of access to medical care, fear of deportation, and lack of fluency in English. This was poignantly illustrated by the death of 5-year-old Sandra Navarrete who died of complications from chicken pox and whose undocumented immigrant parents did not seek medical help until it was too late because they didn't know where to go, had little money, and did not speak English. The media seemed to think their failure was due to something intrinsic in Mexican culture that prevented them from seeking aid.
Other environmental changes affecting health can be seen with the embrace of the "car culture" that typifies the United States. The turning away from mass transportation in favor of gas-guzzling cars has greatly added to pollution and an increase in respiratory diseases, among others. Road accidents are a leading cause of death and injury as well, though at diaparate rates with respect to race, class, and gender. Adolescent and young adult males seem to be the predominant victims, perhaps because of greater indulgence in risk-taking behaviors.

In general, poor people in the United States, particularly members of ethnic minorities, are relegated to areas where industrial pollution is the greatest, or, conversely, find their neighborhoods selected as areas where it is permissible to pollute. They suffer higher morbidity and mortality rates as a result (witness, for example, the markedly increased rates of asthma, particularly among minority children, and sarcoidosis among African American adults; see Baer et al. 1997:55-57). Rundown housing and poor sanitation take their toll on children and adults alike. According to The World Health Report 1997, housing poverty, that is, homes lacking safe shelter, piped water, and adequate sanitation and drainage, contributes significantly to ill health. In the United States during the 1980s, the number of shelter beds available for the homeless in cities of over 100,000 inhabitants nearly tripled. Studies in developed countries show that people spend more than 90 percent of their time indoors, making the dwelling place a critical meeting between people and their environment. (World Health Organization 1997:12). Clearly the chronically poor, most of whom are women and children, are those suffering the highest rates of homelessness. Far from being the result of cultural beliefs and practices, or the genetic makeup of a group, as is sometimes argued, the poor, who in the United States largely consist of ethnic minorities, suffer higher rates of morbidity and mortality because of their poverty.

Environmental and occupational issues as related to health have become a growing concern in the United States. Experiences at Love Canal, Three Mile Island, and the industrial pollution of our rivers and lakes have raised awareness of the fact that these are not local issues, but rather reflect social, political, and medical policy issues as well. There is a role here for medical anthropologists, as Susser (1988:195) argues:

Occupational and environmental health issues represent the intersection of two major areas of anthropological concern: work and health. Struggles surrounding work and health provide channels for the illumination of class, state, and power relations in complex society. Focusing on such situations allows the anthropologist to move away from the study of discrete geographic communities or categorical groups in society to the study of interacting forces that determine the degree of hazard to which workers and their communities are subjected.

Access to Health Care

Yet another area in which medical anthropology has played a key role is in examining the relationship between diversity and access to health care. The United States remains the only industrialized country that does not provide guar-
analytically the influence of socioeconomic factors from genetic differences, and elucidating the interaction of the socioeconomic structure with both cultural traits and genetic differences." In the case of African Americans, improvement in health status came about through the use of strategies to change their status as well as by confronting the exclusionary attributes of health institutions in this country. As Mullings (1989) opines, "there is a complex interaction between culture/lifestyle 'choices' and the structure of differential distribution of jobs, rewards, and resources," including access to health care.

**Bioethics and Medical Anthropology: The Role of Diversity in Ethics**

The field of bioethics, as a subspecialty of moral philosophy, has grown with the development of medical technology. Bioethics came into the spotlight in the United States only in the 1970s with new treatment techniques, such as dialysis and heart transplant surgery, which called for the selection of patients. By the 1980s, passive euthanasia, the ethical treatment of newborns, and mandatory screening of people for the HIV virus were all being debated. For the most part, anthropologists steered clear of these debates, leaving them to the philosophers, theologians, lawyers, and physicians whose opinions dominated the popular and professional literature. Nor was there much public debate on resource allocation or the implications of ethical decisions for disparate and diverse segments of society. In part, this was a reflection of the conceptual foundation of bioethics, whose origins in law and philosophy place emphasis on individual rights and autonomy. As Jessica Muller (1994:430) states: "Grounded in these traditions, bioethics emphasizes logic, codified rules and techniques, and rigorous, precise, objective thinking." As such, there seemed little room for an anthropological perspective with its traditional emphasis on the concept of cultural relativity, a concept deemed better suited to the examination of non-Western moral values. Lévi-Strauss (1990:221), acknowledging the limited influence of anthropology in bioethical debates, notes that there has been a "tendency, consistent with relativistic methodology perhaps, to view the ethical aspects of health care in other cultures as cultural givens and to neglect ways in which they may relate to moral questions and ambiguities." This situation is rapidly changing, however, as anthropologists increasingly turn their attention to ethical debates in medical care. Jessica Muller (1994) and Patricia Marshall (1992), in separate issues of *Medical Anthropology Quarterly*, have each drawn attention to the contributions of anthropologists to bioethical theory and decision making. While much of this work has focused on issues outside of the United States (Kaufert and O'Neil 1990, on informed consent in Canada; Lock and Honde 1990, on reaching consensuses on death in Japan; and Scheper-Hughes 1987, on child survival in Brazil, to name but a few), a growing number of anthropologists have turned their attention to bioethical issues in the context of cultural pluralism in the United States (Hahn 1982, 1987; Iris and Segal 1989; Levin 1986; Scheper-Hughes and Lock 1986, 1987; Levin et al. 1991; Marshall et al. 1991; and Mwaria 1997).

Muller (1994) outlines "four overlapping dimensions of an anthropological approach to bioethics." In her words: "They pertain to the contextual nature of bioethical dilemmas, the cultural embeddedness of moral systems, the multicultural character of many bioethical dilemmas, and the challenge of examining the field of bioethics as a cultural phenomenon" (Muller 1994:453). Nevertheless, she cautions, "just as it may be dangerous to assume that all moral conduct in health care settings can be explained by recourse to a set of four principles, so it is equally dangerous to assume that there is only one anthropological approach to bioethics" (1994:453).

Clearly medical anthropologists will play a growing role in the discourse on bioethical theory. Marshall (1992) points to the following areas for future research: truth telling and disclosure of information; informed consent; death and dying; critical care; and selection of organ transplant recipients. Each of these issues and, I would add, the current debate on physician-assisted suicide, or active euthanasia, is of concern in the United States. In order for medical anthropologists to play a meaningful role in these debates, they must adopt a critical perspective by incorporating issues of diversity, power inequities, and the distribution of resources by the state into their analyses.

**Conclusion**

Medical anthropology has a great deal to contribute to the discourse on the relationship between diversity, ethnic pluralism, and health issues in the United States. To do so we must remain faithful to our holistic approach to the study of *Homo sapiens sapiens* by incorporating data from each of our subdisciplines, and expanding our theoretical perspectives beyond local concepts of belief systems and ecological adaptations to raise new questions pertaining to the ever-changing relationships between diverse populations, ethnic pluralism, and resource allocation in relation to the health issues confronting us in the 21st century.

**NOTES**

1 The following discussion is based largely on Stephen Mohtat's (1998) detailed and comprehensive work, *Human Variation: Races, Types, and Ethnic Groups*.

2 For a detailed comparison of the experiences of Chick Gin and Toshard Mary at the hands of the health authorities, politicians, and the public, see Allen Kraut (1994:78-104).

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Health, Disease, and Social Inequality

Merrill Singer

Diversity, Inequality, and the Coming of Age of Medical Anthropology

The entire history of medical anthropology can be read as a conflicted encounter with the issues of diversity and inequality. Using medical anthropology’s historic encounter with diversity and inequality as a contextualizing frame, this chapter examines the contemporary AIDS epidemic as a case study for classroom discussion of medical anthropology. Since the beginning of the epidemic over 200 anthropologists have worked in AIDS research, program development and implementation, advocacy, and policy development. The global AIDS crisis has been both a significant challenge to medical anthropology and an important influence on current developments within the discipline. The epidemic illustrates the critical importance of diversity and inequality. The final section identifies resources and relevant publications.

Racism in the margins: the prehistory of medical anthropology in context

One of the first professional organizations in anthropology was initiated by an individual whose interests included both medicine and anthropology. In 1862, James Hunt, a physician who specialized in speech pathology, especially stuttering, launched the Anthropological Society of London. The perspectives that Hunt brought into the emergent field of anthropology included the belief that people of African origin constituted a separate species from Europeans and that they were not suited to civilization. Such racist sentiments were not unusual in Hunt’s day, and, directly or indirectly, many early anthropologists contributed to the construction of an ideology of superior and inferior peoples and cultures that rationalized social inequality.

To the degree that Hunt’s puerile views had some lasting impact on medical anthropology, it may have been through his nephew, W. H. R. Rivers, who is generally recognized as a founder of medical anthropology, one of the prizes awarded by the Society for Medical Anthropology bears his name. In 1898, Rivers, fellow physician C. G. Seligman, and anthropologist Alfred Haddon initiated the Cambridge Torres Straits expedition, one of the earliest anthropological field research projects. Using data collected during the expedition, Rivers refuted popular beliefs and argued that the ethnomedical practices of non-Western societies “are not a medley of disconnected and meaningless customs” (Rivers 1924:51). Rather, he argued, they constitute internally coherent structures of cultural beliefs about the causes of disease. However, Rivers also maintained that non-Western ethnomedical traditions and Western biomedicine constitute completely separate domains (Wellin 1977).

In sharply separating the dominant healing system of Western societies from the ethnomedical practices of non-Western peoples, Rivers was stepping into the shadowy footprints laid down by his uncle James Hunt. Both of these early anthropologists, the one concerned with human biology and the other with human culture, separated the world into two disconnected parts: the West and the rest. Additionally, a legacy of Rivers’ approach has been the tendency to believe that indigenous medical systems can only be studied and understood in terms of magical and religious beliefs. As pointed out by Foster and Anderson (1976:5): “this stereotype, uncritically accepted by a majority of anthropologists during the last half century, has severely limited us in our understanding of non-Western medical systems.” This approach also limited medical anthropology’s understanding of biomedicine, because it was not seen as being “susceptible to the same sort of cultural analysis to which [anthropologists] readily subjected [other] medical systems” (Gaines and Hahn 1985:4).

In sum, racist thinking was introduced early into anthropological studies of healing systems. While this perspective would falter during the post-World War II era under the growing weight of cultural relativist ethnographic studies, it tended to be replaced by a micro-level focus that, however much an advance in medical anthropology’s handling of diversity in some regards, failed to fully confront and eliminate earlier tendencies within the field.

The social functions of biomedical ideology: emergent medical anthropology in context

The work of Erwin Ackerknecht (1971), a physician with an abiding interest in indigenous healing, provides a link between the early collection of information about health practices and what would become medical anthropology after World War II. Ackerknecht readily acknowledged that the primary explanatory model he brought to his studies of indigenous medical beliefs and practices derived from Boasian historical particularism and British functionalism. He sought to show that indigenous medical practices are integral and integrated components of their respective cultural systems and hence cannot be understood except in relation to the larger culture pattern which they reflect and of which they are a functionally interrelated part. While they might sometimes be effective in healing illness, the largest contribution of primitive medical practices, he argued, is in helping to shore up and maintain their encompassing cultural
system. However, Ackerknecht, like Rivers, was largely blind to the ways his work ethnocentrically imposed biomedical categories and concepts onto the beliefs and practices of non-Western peoples, as well as to the cultural nature and social structural role of biomedicine.

After World War II there was a marked increase in the number of anthropologists concerned with health issues, and a growing range of opportunities for employment in this area. Anthropologists associated with international development programs accepted "uncritically the superiority of modern medicine and modern health care delivery" and sought to make them attractive and available to indigenous peoples (Russo 1980:848). Failing to see the highly political nature of international health aid, many of them felt that the real problem facing anthropologists in international public health lay in surmounting cultural resistance to Western medical practices (Murrieta 1955).

The postwar period also witnessed a movement of anthropologists into clinical settings in the West in the roles of teacher, researcher, administrator, and in some cases clinician. The impact of this development has been telling, because in the clinical setting anthropologists have had to adopt and to rationalize the acceptance of subservient, support roles relative to physicians. Consequently, clinically based anthropologists have stressed the importance of compliance. While these sentiments are understandable given the distribution of power and decision-making authority in medical settings, it would appear, as Hunter (1985:1302) concludes, that to a large degree anthropologists working in hospitals, clinics, and medical schools have been "co-opted by the medical establishment."

Notable in this regard, is Polgar's (1962:179) observation, in contrasting medical anthropology's role with that of anthropologists working in colonial settings, that "it is certainly easier to share the value of improving health... than to aid the operations of a colonial administration." That there might be an underlying or even direct relationship between the two roles, that both may structure inequality along class, racial, gender, and ethnic lines, is not always appreciated (O'Neill 1989), and, when it is appreciated, medical anthropologists have been cautious not to get "overwhelmed with the association between colonialism and Western medicine" (Krautstatter 1978:400). Sometimes, however, the association is overwhelming. Packard (1989:689), for example, notes that in South Africa prior to the fall of the apartheid government, "white medical authorities had considerable influence on the development of popular thinking among whites about the status of Africans in South African society and in the development and persistence of... stereotypes" that legitimated oppressive policies against the African majority. Packard supports this argument with findings from an assessment of South African medical journals, conference reports, commission testimonies, and other medical records showing that tuberculosis and other diseases were construed in medical discourse as proof of the physiological susceptibility of Africans to life in white cities, supporting thereby the oppressive structure of apartheid segregation.

Inherently, the biomedical model tends to lend itself to this type of use because it narrowly locates the causes of ill health in the actions and organs of sufferers.

A sick individual is regarded as a set of physical symptoms, rather than as a person who belongs to a social class in a particular society. This process turns our attention away from the political roots of disease, and conceals these roots by providing us with an alternative explanation. By and large, says this explanation, people are responsible for their own health. If they get sick it is a chance occurrence, no one is to blame... If people get cholera, it is because they do not use "safe, chlorinated water." If children are unhealthful, their parents do not feed them properly, and they have more children than they can look after properly. Illness is seen as nature's revenge on people who live unhygienically and do not observe rules of cleanliness. (de Beer 1986:70)

The potential for biomedical co-optation of medical anthropology - that is, for the quiet incorporation of key "Western ideological medical assumptions...[that] intrinsic both to structures of domination within Western contexts and to the controlling articulation of the West with non-Western peoples" - is rooted in the role medical anthropologists often play in the clinical setting and in the limited examination of biomedicine as a socio-economic system that has characterized much work done within the subdiscipline (Kapferer 1988:429).

The encounter unveiled: contemporary debates in the field

The general acceptance of medical anthropology during the 1970s and early 1980s helped to gloss over underlying problems in the ideology and roles of medical anthropology, the problems described in the title of this chapter as "the burdens of oppression." Within a few years of medical anthropology's formal arrival, however, its perspectives, approaches, and activities became the subject of internal critiques and heated debates. In no small way, medical anthropology's handling of social inequality - and in the eyes of some, its unintended hegemonic support of inequality - have been central to these disputations.

The dominant, if tacit, theoretical perspective within the field at the time was an approach called medical ecology. Rooted in both cultural ecology and evolutionary theory, this approach embraces adaptation, defined as behavioral or biological changes at either the individual or group level that support survival in a given environment, as the core concept in the field. From this perspective, health is seen as a measure of environmental adaptation. In other words, a central premise of medical ecology is that a social group's level of health reflects the nature and quality of the relationships "within the group, with neighboring groups, and with the plants and animals [as well as antibiotic features] of the habitat" (McElroy and Townsend 1996:12). Beliefs and behaviors that improve health or protect societal members from disease or injury are adaptive.

Understanding human biology and behavior as an interactive set of adaptations to ecological and social challenges makes a lot of sense to many medical anthropologists. Yet others began to question this approach. Good (1994:45), for example, questioned the utility of treating disease as a natural object and medical systems as utilitarian social responses to intrusive
natural conditions. Lost in such understanding, he maintained, was full appreciation of the human cultural/symbolic construction of the world that people inhabit. In other words, humans can only experience the external material world through their cultural frames, and thus diseases, as they are known, consciously and somatically by sufferers and healers alike, are containers packed with cultural content. Even science or biomedicine do not offer culture-free accounts of the physical world.

Critical medical anthropologists, while agreeing with much in interpretative medical anthropology’s critique of the ecological model, asked questions about the origin of dominant cultural constructions, including: whose social realities and interests (e.g. which social class, gender, race, or ethnic group) do particular cultural conceptions express, and under what set of historic conditions do they arise? Further, they pointed out that the medical ecological model did not squarely address the fact that “it is not merely the idea of nature—the way [external reality] is conceived and related to by humans—but also the very physical shape of nature, including of course human biology, that has been deeply influenced by an evolutionary history of hierarchical social structures—that is to say, by the changing political economy of human society” (Singer 1996a:497).

The problem inherent in narrowly conceptualizing the health aspects of the human/environmental relationship in terms of adaptation can be illustrated with the case of the indigenous people of Tasmania, an island that lies just off the southeastern tip of Australia. Tasmania was successfully inhabited by Aboriginal people for over 30 thousand years prior to the arrival of Europeans at the end of the 18th century; nonetheless, medical ecologists cite the Tasmanians as a case of maladaptation that led to the dying out of these people by 1876.

In about 12,000 years of isolation from the mainland, the Tasmanians developed, losing the ability to make many tools, to make fire, and to construct rafts or catamarans that would have allowed them to fish and travel. The division of labor between men and women was inefficient, endangering women. Their political ecology emphasized raiding, capture of women, and competitiveness between tribal bands. During the cold season they were hungry, and their clothing and housing were inadequate. . . . [In sum] their way of life was far from ideal, and the society quickly collapsed after Europeans arrived. (McElroy and Townsend 1996:112, emphasis in original)

The impression given by this account is that the arrival of European settlers on Tasmania in the late 18th century played but a small part in the disappearance of a society that was poorly adapted to its environment. A closer examination of the historic political economic events surrounding the nature and impact of European arrival suggest a different conclusion. Within 30 years of the landing of the British on Tasmania, the indigenous population, which had been stable at around 4,000–5,000 prior to contact, dropped to a mere 111. This shocking level of depopulation, which was occurring not just in Tasmania but throughout Britain’s Third World colonies, led the British House of Commons to constitute a 15-member Select Committee on Aborigines, which published its findings in 1837. The committee concluded that the lands of indigenous people “had been usurped; their property seized; their character debased; . . . European vices and diseases have been introduced” (quoted in Bodley 1975:25). Douglas Oliver (1961:161), an anthropologist with extensive experience in Oceania, reports the exact nature of these “European vices,” noting that the aboriginal peoples of Australia and Tasmania were the victims of playfulness: the sport-loving British pioneers occasionally relieved the boredom of isolation by hunting “abos” in lieu of other game. More frequently, however, these hunts were serious undertakings: now and then an aborigine would be bush enough to kill or steal livestock pastured on their bored territories, and that called for systematic drives of extermination by the white owners. Aboriginal men, women, and children would be rounded up and shot; to slay a pregnant woman was, logically, doubly commendable. Sometimes the same objective was accomplished by leaving poisoned food . . . The tragedy was played to its finish in Tasmania, where all [indigenous people] were wiped out . . . by 1876 . . . One efficient colonial administrator even declared an open season against the Tasmanians, culminating in the infamous “black Drive” [an open season on the hunting of Tasmanians] of 1830.

Quite simply, the “disappearance” of the Tasmanians was not a consequence of maladaptation to their environment. They were victims of the wave of genocidal extermination that characterized the colonial era. Adding insult to grave injury, the 7,000 Tasmanians who identify themselves as aborigines today have, in the words of an aboriginal rights leader, “had to fight the stigma that we didn’t exist” (quoted in Quammen 1996:396).

Ironically, the ultimate lesson of the Tasmanian case is that a people’s will to survive even against enormous social and political odds may be the real measure of importance in assessing the meaning of health at the population level. Also, the Tasmanian case starkly reveals that the higher rates of morbidity and mortality commonly found among the poor and the oppressed reflect patterns of social inequality and unequal access to health-conferring resources rather than failed adaptation to natural environments. One goal of the critical medical anthropologists is to explain how socially meaningful realities, including beliefs about health and illness, are created and maintained by a group of people in response to a given set of social relations and conditions. They are also concerned with developing a comprehension of how socially structured relations, like those among social classes, genders, or ethnic groups, place subordinated social strata in harm’s way. In short, they attempt to understand the ways political-economic forces, cultural practices, and biological factors combine to produce both people’s ideas about disease (and risk) and associated behaviors. They are interested as well in the actual manifestation and distribution of disease and other indicators of poor health.

Consequently, critical medical anthropologists are concerned with the historic pathways through which particular health beliefs and practices emerge (for example, the frequent U.S. emphasis on individual responsibility for getting sick because of so-called lifestyle “choices”) and through which specific diseases
Engaging Diversity in Medical Anthropology: The Case of AIDS

AIDS, because of its distribution, the ways in which societies have responded to it, and the fact that it remains a pressing health issue in the contemporary world, offers an important window on the social and cultural construction of health and disease within the context of diversity. While anthropologists were slow to become involved in research and intervention initiatives pertaining to AIDS, more than 200 anthropologists are currently engaged in these initiatives. As a result, "it is safe to assert that no topic in the entire field of anthropology commands more attention and more scholarly involvement at the present time" (Bolton and Ovoco 1994:vi). This has produced an extensive anthropological literature documented in The AIDS Bibliography (Bolton and Ovoco 1994), in M.A. theses and doctoral dissertations, in ethnographies (e.g. Sobu 1999; Green and Sobu 2000), in edited collections (e.g. Farmer et al. 1996; Feldman 1990, 1994; Herd and Lindenbaum 1992; Marshall et al. 1999; Sobu 1999; Singer 1998; Van Vugt 1994), in reviews (e.g. Farmer 1997), and in sections on AIDS in anthropological textbooks (e.g. Baer et al. 1997). Cultural diversity and social inequality have been central topics in much of this work.

AIDS, nationality, and ethnicity

Epidemics, and the social ways in which people respond to them, provide a window on the nature of human societies. Briggs' (1967:77) description of 19th-century cholera as "a disease of society in the most profound sense" applies as well to many other epidemics, including the contemporary global AIDS pandemic. One "lesson" from past epidemics is the frequent pattern of "victimiz-

ing and stigmatizing of helpless members of minority groups and the indifference of public officials calls to human suffering" (Fee and Fox 1992:2). This suggests that epidemics are shaped as much by social as they are by biological factors. The AIDS epidemic is no different.

Among the range of social factors that shape the direction, extent, and character of an epidemic, the structure of social relations that grow out of the system of economic production have particular importance. This realization draws our attention to the role of political-economic relationships in understanding epidemics, including AIDS. Batteon and Goldsby (1988:2) assert that AIDS has spread "along the fault lines of society and become a metaphor for understanding society." By referring to AIDS as a metaphor for society, they draw attention to the ways in which the AIDS crisis exposes the nature and consequences of social inequality within and between nations and groups in the contemporary world, and the impact of these relations on health. Indeed, it is not inappropriate to say that AIDS has revealed itself as a disease of society—not merely a social disease, but a disease of stratified and oppressive social relations that exist locally within communities, nationally within the social systems of individual countries, and internationally within the global system of nations. Throughout its known history, AIDS "has repeatedly demonstrated its ability to cross all borders: social, cultural, economic, political" (Mann et al. 1992:3), but often this has not brought people closer together to appreciate their common plight and their shared needs as human beings. Rather, the epidemic commonly has led to increased conflict and social contestation, usually along preexisting lines of tension. AIDS very likely has become the most political affliction visited upon the human species in modern times. This disease reminds us just how political are all facets of health, illness, treatment, and health-related discourse. This point is illustrated below in the discussion of three faces of AIDS: AIDS in Haitians, AIDS in the inner city, and AIDS in women.

The issue of origin: AIDS in Haiti

As the second New World colonial creation to successfully overthrow European political dominance and the world's first independent black republic, Haiti has long held a special place in Euro-centered global politics and political discourse. This place was defined early in Haitian history. Following on the heels of the American Revolution, and certainly inspired by the American victory over British colonialism, a general slave rebellion was launched in Saint-Domingue in 1791. A little over a decade later, rebellious forces under Jean-Jacques Dessalin declared independence from France and adopted the indigenous Indian name of Haiti for their new nation. Fearful of the lessons of a triumphant slave rebellion, the West condemned Haiti to the status of an international pariah state, a position that was sustained through the projection onto the former colony of an image of dangerous and bizarre Otherness. In the Western imagination, Haiti was constructed as "another world far from what they know as ordinary" (Barry et al. 1984:337). Thus voodoo, the indigenously formed syncretic religious system of Haiti, became synonymous in the West with evil,
the epitome of so-called "black magic," zombism, strange trances, unearthly fears, and unbridled animistic sexuality.

With the appearance of AIDS, this distorted portrayal was generalized, and Haitians were represented as dangerously infectious and life-threatening by their very nature. By 1982, only a year after the identification of the first AIDS cases, Haitians were labeled as a "risk group" by the U.S. Centers for Disease Control. As a consequence, it was not long before being a Haitian meant being "perceived as an AIDS 'carrier'" and "the fact that AIDS was found among homosexuals in Haiti...was read as evidence that Haiti was the source of the disease." (Gilman 1987:102). The U.S. press carried stories quoting Dr. Bruce Chabner of the National Cancer Institute, who reported: "we suspect that this [disease] may be an epidemic Haitian virus" (quoted in Farmer 1992:2). The politics-ideological context for these developments lay in the well-established constructed images of Haiti.

The link with voodoo was asserted or suggested in both medical and social science texts. Voodoo practices were considered a cause of the syndrome by two MIT physicians (Moses and Moses 1983). Other "bizarre" or "weird" features alleged to be characteristic of Haiti also were implicated.

Some U.S. researchers proposed that AIDS began with an outbreak of African swine fever in Haitian pigs, and the swine virus had been passed to humans. Others suggested that a Haitian homosexual may have contracted the swine virus from eating undercooked pork, and then passed it on to homosexuals partners from the United States during acts of prostitution... Others proposed that Haitians may have contracted the virus from monkeys as part of bizarre sexual practices in Haitian brothels. (Sabatier 1988:65)

"Even cannibalism, the most popular nineteenth-century smear, was resuscitated during discussions of Haiti's role in the AIDS pandemic" (Farmer 1990:438). In the dark light cast by such linkages, in 1990 the U.S. Food and Drug Administration banned Haitians in the U.S. from donating blood.

All along, Haitian physicians studying the disease had produced evidence to support an alternative, more mundane, although no less politically significant explanation of the high prevalence of AIDS among Haitians. They found that most early cases could be traced to a red-light prostitution district in Port-au-Prince, and that none of the stored blood samples drawn from Haitian adults during the 1977–79 outbreak of dengue fever carried antibodies to HIV. These data were consistent with the hypothesis that HIV was not indigenous to the country but rather had been introduced into Haiti in the late 1970s or early 1980s either by tourists or returning Haitians coming from the United States or Europe (Pape et al. 1986). It is well known that many foreigners came to Haiti during the 1970s tourist boom seeking sex. Not surprisingly, advertising to exchanging sex for desperately needed tourist dollars was quite frequent among early Haitian AIDS patients.

Driven by poverty that was itself the product of Haitian subordination to external economies and internal stratification, prostitution became a means of survival for some rural migrants to Haiti's crowded capital. In short, the politics of AIDS among Haitians and other Caribbean peoples are the politics of political-economic domination and, as a result, "the map of HIV in the New World reflects to an important degree the geography of U.S. neocolonialism" (Farmer 1992:261). But this set of political relations was successfully submerged in more exotic accounts of Haitian AIDS, images that exuded racism while they mystified hegemony. The mundane and age-old tale of political-economic domination leading to sexual domination that is a pool piece of the real story of Haitian AIDS, remained hidden behind newfangled renditions of the master's fear of the rebellious subordinate. And, in various guises, this is a significant part of the history and politics of AIDS everywhere, from the preoccupation with "discovering" the African origins of the epidemic to the effort to construct AIDS as a disease peculiar to the bodies of gay men and people of color, a disease of the distant and diminished Other.

Ironically, Haitians have their own theory of how AIDS, or sida as it is known in Creole, came to their island and how it spread to large numbers of individuals living throughout Haiti, especially among those in urban areas from the poor and working classes. This theory, while no less a cultural creation than other popular ideas about AIDS, nonetheless reflects a clearer understanding of the global system than is commonly found among North Americans and is an example of the fact that those at the bottom often have a somewhat better, less mystified, understanding of the actual nature and structure of oppression than those higher up the ladder of social power.

AIDS and the inner-city health crisis

When it comes to issues of health and well-being, it is reasonable to describe the United States as constituting (at least) two separate and intertwined societies: people of the inner city and everyone else. While poverty is by no means confined to the inner city, and neither are all oppressed ethnic minorities or people of color, the intersection of urban poverty and socially devalued ethnicity (especially being African American and Latino, and in some parts of the country Native American and Asian as well) has proven to be a particularly unhealthy combination. One consequence has been the rampant spread of AIDS in many U.S. inner-city areas. Almost half of people in America who have been diagnosed as having AIDS are African Americans and Latinos from impoverished urban neighborhoods.

In retrospect, it is clear that AIDS was a profoundly unexpected disease, "a startling discontinuity with the past" (Fee and Fox 1992:1). As McCormick (1990:10) suggests, global public health efforts that predate the beginning of the AIDS epidemic, such as the smallpox eradication program, "reinforced the notion that mortality from infectious disease was a thing of the past." Consequently, whatever the actual health needs of the heterogeneous U.S. population, the primary concerns of the health care system were the so-called Western diseases—those, chronic health problems, such as cancer, of a developed nation with an aging population. However, it is evident that low-income, marginalized areas of U.S. cities have been rocked by an explosive chain reaction of interconnected health crises. Examination of these phenomena suggests that standard epidemiological terms like "epidemic," "endemic," and "pandemic"
do not adequately label the contemporary inner-city health scene, which is characterized by a set of closely interrelated endemic (long-enduring) and epidemic (rapidly spreading) conditions, all of which are strongly influenced by broader set of political-economic and social factors, including high rates of unemployment, poverty, homelessness and residential overcrowding, substandard nutrition, environmental toxins and related environmental health risks, infrastructural deterioration and loss of quality housing stock, forced geographic mobility, family breakup and disruption of social support networks, youth gang and drug-related violence, and health care inequality. As a result, as McCord and Freeman (1990) have observed, men in Bangladesh have a higher probability of survival after age 35 than men in Harlem. More generally, "the death rate in blacks is higher than that in whites, and for many causes of death mortality differentials are increasing rather than decreasing" (Navarro 1990, 1238). However, these differences cannot be understood only in terms of racial inequalities, there are significant class factors involved as well. The vast majority of urban-dwelling African Americans, as well as Latinos, "are members of the low paid, poorly educated working class that have higher morbidity and mortality rates than high-earning, better educated people" (Navarro 1990, 1240). Indeed, these mortality differentials are directly tied to the widening wealth and income differentials between the upper and lower classes of U.S. society.

Rather than treating AIDS in isolation as a new epidemic, I have suggested the term *syndemic* to refer to the synergistic or intertwined and mutually enhancing health and social problems facing the urban poor (Singer 1994). Studies show that urban minority populations suffer from disproportionately high rates of preventable infant mortality and low birthweight, diabetes, hypertension, cirrhosis, tuberculosis, substance abuse, human immunodeficiency disease, and sexually transmitted diseases (Council on Scientific Affairs 1993; Secretary's Task Force on black and Minority Health 1985; Turner et al. 1989). The differences are striking, and infant mortality, often used as a general indicator of the health of a population, provides a disturbing example.

African American children are twice as likely to be born prematurely, die during the first year of life, suffer low birthweight, have mothers who receive late or no prenatal care, be born to a teenage or unmarried parent, be unemployed as teenagers, have unemployed parents, and live in substandard housing. Furthermore, African American children are three times more likely to be poor, have their mothers die in childbirth, live in a female-headed family, be in foster care, and be placed in an educable mentally-retarded class. (Hope 1992:153)

Consequently, household income is the single best indicator of an infant's vulnerability, with poor families having infant mortality rates that are one and a half to three times higher than wealthier families (Nercessian 1988:374).

Class disparities in mortality rates are not limited to income, substandard differences also have been found among older children. For example, children from inner-city poor families are more likely to die from respiratory diseases or in fires, than children from wealthier suburban families. Inadequately heated and ventilated apartments also contribute to death at an early age for poor urban children. Hunger and poor nutrition are additional factors. Studies in Hartford, Connecticut, have shown a significant link exists between hunger, malnutrition, and inner-city poverty, especially among ethnic minorities (Damio and Cohen 1990; Pérez-Escamilla et al. 1996). Federal cuts in food assistance programs have contributed to significant drops in the number of children receiving free and reduced-price school lunches, producing growing reports of hunger and malnutrition from pediatricians in cities around the country (Physician Task Force on Hunger in America 1985).

Cardiovascular disease commonly has been portrayed as primarily a consequence of either genetic predisposition or "lifestyle choices," including such factors as personal eating or exercise habits. Research by David Barker and his colleagues shows that the lower the birthweight of a newborn, or the body-weight of a one-year-old infant, the greater the level of risk for developing heart disease or stroke in adulthood. Low-birthweight babies, they report, have higher blood pressure and higher concentrations of the clotting factors fibrinogen and factor VII as well as low-density-lipoprotein (LDL) cholesterol than adults, factors that are associated with susceptibility to cardiovascular disease. Numerous attempts have been made to explain excessive levels of premature morbidity and mortality from cardiovascular diseases, especially heart diseases, stroke, and hypertension. Some explain this pattern in terms of racial-genetic predisposition; however, research by Barker and others reveals the likely relationship of these diseases to the larger epidemic health crisis and thus to poverty and social inequality (Dressler 1991).

Smoking and tobacco use are significant causes of cardiovascular and other diseases. Ethnic minority populations suffer from higher rates of smoking-caused disease and death than do whites (Rivo et al. 1989). Tobacco use has been found to be an important factor in low birthweight, indicating the multiple consequences of tobacco promotion for minority communities. Beyond the immediate health effects of smoking, Nichter and Cartwright (1981:237) argue that for poor families in particular smoking is damaging in three additional ways:

First, smoking leads to and exacerbates chronic illness, which in turn reduces adults' ability to provide for their children. Smoking also daily diverts scarce household resources which might be used more productively. And third, children living with smokers are exposed to smoke inhalation (i.e. passive smoking) and have more respiratory disease.

Alcohol-related problems have been found to be especially common among Latino and African American men. Studies in the Bay Area and Hartford have found that, compared to a national sample of men, Puerto Rican men were much more likely to report health problems associated with drinking, to have a friend or spouse complain about their drinking, or to have alcohol-related problems with the police (Singer et al. 1992). Similarly, studies of inner-city African Americans have found they experience higher than average rates of
physiological complications, such as esophageal cancer and cirrhosis mortality, related to long-term heavy alcohol consumption (Martin et al. 1980). While both Latino and African American cultures include strong proscriptions on alcohol consumption (in certain contexts, for certain social subgroups, or in relationship to particular religious belief systems), inner-city areas are populated by people who embrace a range of values and social practices related to drinking (Gaines 1985). Although abstinence is notably high among particular social groupings in the inner city, drinking-related problems are comparatively high for both African Americans and Latinos.

The association between drug use and deteriorated inner-city areas has been discussed in the social science literature since the 1920s. A summary of recent epidemiological studies indicates that, while there is a decline in current illicit drug use nationally, "minorities, particularly blacks and Hispanics, are more likely to reside in central city areas and may therefore be at risk for drug abuse and ultimately more at risk for the negative social and health consequences associated with drug abuse" than the general U.S. population (Kopstein and Roth 1990:1–2). Among adults over 35 years of age, African American men are the population subgroup most likely to report illicit drug use at least once in their lives, in the past year, and in the past month. Some 37 percent of African American men in this age group report lifetime use, compared to 23 percent of white men. An examination of individual drug prevalence patterns also confirms the high level of risk among ethnic minority groups. Data from the National Institute on Drug Abuse's national drug abuse warning network for monitoring the medical consequences of drug abuse (DAWN) as reported by participating hospital emergency rooms and medical examiner offices, show African American patients were the most likely group to mention use of an illicit drug in conjunction with their emergency room visit. The data suggest that, directly and indirectly, drug abuse disproportionately affects inner-city ethnic minority populations. Importantly, despite this fact, Kopstein and Roth (1990:51) note that "blacks presenting with a drug abuse problem at the emergency rooms in the DAWN system were more likely than whites to be treated and released. Whites, on the other hand were more likely to be admitted to the hospital."

Both African Americans and Latinos have been found to be overrepresented among the large number of injection drug users (IDUs) in U.S. urban areas (Friedman et al. 1990). David Musto, whose book The American Disease (1987) is a classic in the drug field (even though drug use, or even injection drug use, are clearly international and not peculiarly North American problems), has assembled data to suggest a steady rise in the number of IDUs from the 1970s on. By 1987, aggregated data from state alcohol and drug agencies indicated that there were about 1.5 million IDUs in the United States. Friedman, Soberman, et al. (1987), using New York State Division of Substance Abuse Services admissions data, estimate that the ethnic composition of injection drug users in New York City is 38% African American, 38% Latino, and 23% white, while the city as a whole is 52% white, 24% African American, and 20% Latino.

These data suggest that under conditions of discrimination, poverty, deprivation, homelessness, unemployment, and frustrated expectations, mood-altering drugs found an open market in inner-city areas (Suarez 1996). This response to oppressive conditions was facilitated by the ready availability of drugs in ghetto and barrio neighborhoods, a consequence of Mafia targeting of these areas for drug distribution. As Waldorf (1973:23) observes: "Heroin is seemingly everywhere in black and Puerto Rican ghettos and young people are at risk of drug use from an early age." Drugs offer insulation from the outside world allowing users to feel that their harsh and hostile environment cannot penetrate their lives. They escape from their problems, other people, and feel better. (Waldorf 1973: 89)

The transmission of AIDS, of course, has been closely linked to drug injection. Approximately 35 percent of AIDS cases reported to the Centers for Disease Control and Prevention (CDC) (1997a) are among injection drug users. The ethnic and gender breakdown of new injection drug use–related AIDS cases reported in 1995 was: 20% female, 15% men who have sex with men, 30% African American, and 24% Latino (Centers for Disease Control and Prevention 1996). Among women, 51% of all U.S. AIDS cases are African American, and another 20% are Latina (Centers for Disease Control and Prevention 1990). Among children, over 75% of AIDS cases are among ethnic minorities. The incidence of heterosexually acquired AIDS is almost 10 times greater for African Americans and 4 times greater for Latinos than for whites (Aral and Holmes 1989). Similarly, "[a] disproportionate share of the burden of adolescent AIDS cases is borne by minority youth" (Miller et al. 1990:160). Importantly, the median survival time of individuals diagnosed with AIDS varies by ethnicity. In Connecticut, prior to the introduction of new AIDS treatments, the median survival in months was 11.2 for whites compared to 7.7 for African Americans and 10.2 for Latinos (Connecticut Department of Health Services 1990), reflecting the broader differences in the general health and access to health services of these populations. Since the introduction of increasingly effective combination therapies with antiviral agents, there has been a drop in the number of estimated AIDS deaths (for example, by 13% between 1995 and 1996). However, the decline for non-Latino whites between 1995 and 1996 was 21% compared to 2% for African Americans and 10% for Latinos (Centers for Disease Control and Prevention 1995b).

Men who have sex with men (MSM) make up the largest proportion (44 percent) of persons who have been diagnosed with AIDS (Centers for Disease Control and Prevention 1997b). Rates of HIV/AIDS are especially high among ethnic minority MSM and account for 31 percent of the reported cases among MSM. Minority MSM suffer from what Friedman, Jere, et al. (1998) refer to as "multiple subordination," and are often cut off from support structures for people with HIV/AIDS that have developed in the predominantly middle-class, gay-identified community.

There has been a dramatic rise in the incidence of syphilis in the United States, "attributable to a very steep rise in infection among black men and women" since the mid-1980s (Aral and Holmes 1989:63). By 1991, 85 percent of primary and secondary syphilis cases recorded were among African Americans (Hahn et al. 1989). In part, this sharp increase has been linked to sex for drugs
or money exchanges associated with cocaine use. Blood test data show that low income, urban residence, and a lack of education are associated with positive blood results for syphilis. The rate of incidence for gonorrhea infection, pelvic inflammatory infection, herpes simplex virus type 2, hepatitis B, and cervical cancer with a suspected STD etiology is 2.3 times greater among African-Americans than whites (Halb et al. 1989, Aral and Holmes 1989, Centers for Disease Control and Prevention 1992).

As this epidemiological overview suggests, the diseases and conditions that make up the inner-city syndemic are closely intertwined. Poverty contributes to poor nutrition and susceptibility to infection. Poor nutrition, chronic stress, and prior disease produce a compromised immune system, increasing susceptibility to new infection. A range of socioeconomic problems and stressors increase the likelihood of substance abuse and exposure to HIV. Substance abuse contributes to increased risk for exposure to an STD, which can, in turn, be a co-factor in HIV infection (Ho 1996). HIV further damages the immune system, increasing susceptibility to a host of other diseases. In this way, HIV increases susceptibility to tuberculosis; however, there is growing evidence that the tuberculous bacteria, in turn, can activate latent HIV. Locating and reconceptualizing AIDS within the broader syndemic that plagues the inner-city poor, helps to demystify the rapid spread of the disease in marginalized populations. In this context, AIDS itself emerges as an opportunistic disease, a disease of compromised health and social conditions, a disease of poverty. For this reason, it is important to examine the social origins of disease and ill health, as well as the immediate causes (e.g. particular pathogens) of specific health problems. In the case of AIDS, conceptually isolating this disease from its wider health environment has resulted in the epidemiological construction of “risk groups” and “risk behaviors” which, rather than unhealthy living and working conditions, discrimination, racism, and homophobia, and the ways in which these conditions foster the spread of the Human Immunodeficiency Virus, have become the primary focus of public health efforts.

Women and AIDS

Early in the epidemic it was assumed that AIDS was a disease of men, in particular, gay men. The case was built as the first reported cases of what later would be called AIDS were documented in the public health literature. All of the patients were gay men from New York and California. Within two years of the first report on AIDS, however, similar symptoms began showing up among female (and male) injection drug users in New York, and also among their children. Soon a matching set of symptoms was reported among women in other states as well. Despite these early cases, AIDS in women, and the gender-specific manifestations of the disease were not recognized for a number of years. AIDS came to be defined in terms of its particular symptomatic expression among men. Consequently, many women in the United States and elsewhere died of AIDS but were never counted in the upwardly spiraling AIDS statistics. The initial standard definition of AIDS was the combined state of exhibiting antibodies (created by the body’s immune system to fight off the disease) to the Human Immunodeficiency Virus (HIV) and the presence of one or more specified degenerative or neoplastic diseases (indicating that the immune system was failing in its mission to protect the body from the invading pathogen). However, there were many individuals who expressed clinical symptoms and laboratory abnormalities that suggested infection with HIV but did not meet the CDC criteria for AIDS. Most notable in this regard were opportunistic HIV-related conditions common among or peculiar to women. Various conditions, including pelvic inflammatory disease and yeast infection, as well as cervical cancer are more frequent, more severe, and less responsive to treatment among HIV seropositive women, suggesting a diminished immune system capacity. However, these conditions were not officially defined or treated as manifestations of AIDS. As a result of social pressure – pressure from AIDS activists and women more than from the biomedical world – the official definition of AIDS was changed in January 1993. Now, diseases like invasive cervical cancer in women who were seropositive (i.e. infected with HIV) were included as opportunistic conditions and counts of remaining T-cells (because T-cells, an important component of the immune system, are targeted by HIV) became part of the definition of having AIDS. As a result, during the first 3-month period after the redefinition, the number of women diagnosed with AIDS increased by over 200 percent compared to the same period a year before. One of the early signs that HIV could and would spread among women was the high rate of heterosexual transmission that was occurring among non-drug-using women in Africa in the early 1980s. But recognition of the implications of the spread of HIV in Africa did not happen for at least two reasons. First and foremost, there is the issue of racism. The initial cases in Africa of what later was labeled AIDS were documented by physicians working in Kinshasa toward the end of 1981. AIDS research in Africa has focused on “sexual promiscuity” (that is, sexual relations with multiple partners), which often is attributed to moral weakness. Sexual behavior among people of African origin frequently has been explained in terms of exotic cultural norms without consideration of the powerful social and economic constraints underlying this “high-risk” behavior (Romero-Daza and Himelgreen 1998). Additionally, focus on stigmatized AIDS “risk groups” (e.g. prostitutes) downplayed social structural features of the African epidemic. These emphases increased the isolation of women who became infected with the virus, especially those in monogamous relationships who got HIV from their primary partners. The second reason is that, since the beginning of the AIDS pandemic, there has been an almost unconscious invoking of “otherness” (that is, thinking of AIDS as a disease that only strikes other people, people different from us) and an intense stigmatization of those who have become infected. Consequently, the heterosexual transmission of AIDS in Africa was not treated as relevant to the United States. As the epidemic developed and the number of AIDS cases among women in America mounted, it became clear that women experience the negative impacts of AIDS in three different ways. First, they must endure their own risk of infection and the physiological and emotional consequences of the
It is well recognized that women in poverty are far more likely to have sex partners who inject drugs, have high rates of STDs and HIV, and face discrimination in access to health care and other services (Nyanzubi et al. 1993). Combined with addiction, poverty decreases viable economic options for women, and increases their need to exchange sex for money or drugs to support themselves and their families. Moreover, women's economic dependence on men, gender expectations which force them into submissive roles, and the psychological pressure on women to deny risk with primary partners as a means of affirming trust in their relationships and personal self-worth, influence some women, particularly those in poorer economic circumstances, to limit AIDS preventive measures (Kane 1990). At issue are the specific ways in which power is exercised by women and men in decision making about sexual behaviors, how gender roles and rules mediate behavior changes particularly related to sexual activity or drug use with male partners, and how poverty affects each of these factors.

Women of color in the United States face the greatest risk of HIV infection, including infection through heterosexual transmission. Studies of AIDS knowledge, perceived HIV risk, and risky practices have shown high knowledge levels among African American women, despite lower perceived risk, and high rates of risky sexual activity, especially when accompanied by cocaine/crack use (Flaskrud and Nyanzubi 1989). This pattern of high risk coupled with limited perception of risk is especially common among Latina women who are linguistically and socially isolated from the surrounding non-Latino community (Singer et al. 1998). Other factors such as poor self-esteem, attitudes about condom use or sexual assertiveness, and beliefs regarding male/female relationships potentially increase the risk, or impede the prevention, of HIV transmission specifically among African American and Latina women. At the same time, some cultural beliefs and attitudes offer promise for encouraging risk reduction. For example, the idealized role of Latino men as protectors of their family's well-being could be used as an incentive for the use of condoms to protect a pregnant woman from becoming infected and transmitting the virus to her unborn child. Clearly, multiple factors, including many that are the direct result of social inequality, interact to create multiple levels and sources of HIV risk for women in the United States, particularly for women of color. Among these women, sociocultural and biological vulnerability interact synergistically to put them regularly in harm's way.

RESOURCES

In medical anthropology, there have been some efforts to develop educational tools for classroom use, such as Teaching Medical Anthropology (Todd and Ruffin 1979) developed by the Society for Medical Anthropology; the Training Manual in Medical Anthropology (Hill 1991) produced by the American Anthropological Association; or the educational video Anthropologists at Work: Making a Difference (which features several medical anthropologists talking about their work and includes an accompanying
handbook designed to answer student questions about the video) produced by the National Association for the Practice of Anthropology. However, on the whole the production of teaching aids other than textbooks remains an underdeveloped area. The issues of diversity and inequality in U.S. society have rarely been primary topics, although they have been addressed in articles appearing in the primary journals of the field: Medical Anthropology, Medical Anthropology Quarterly, Social Science and Medicine, Culture, Medicine and Psychiatry, and Human Organization. In Medical Anthropology and the World System (1993) Hans Raser et al. address issues of diversity, inequality, and health. Other helpful resources are the web page of the Society for Medical Anthropology: <http://www.people.memphis.edu/~sma> and the Society for Medical Anthropology's monthly column in the Anthropology Newsletter.

On the specific topic of AIDS and diversity, other resources are available. The AIDS Bibliography (Bolton and Orezco 1994), The Anthropology of AIDS: Syllabi and Other Teaching Resources (Bolton and Kemple 1992), and the newsletter of the AIDS and Anthropology Research Group. Special issues devoted to AIDS have appeared in a number of anthropology journals, including Medical Anthropology Quarterly (4[1], 1990), Practicing Anthropology (15[4], 1993), Medical Anthropology (10[2], 1989; 14[2–4], 1990; 18[1], 1997), and Culture, Medicine, and Psychiatry (17[4], 1993). Also of interest are special issues of non-medical anthropological journals, including one entitled "Hispanics and AIDS" in the Hispanic Journal of Behavioral Sciences (12[4], 1990), a set of articles on African Americans and AIDS in Transforming Anthropology (4[1–2], 1993), and a special issue of the Journal of Sex Research (28[2], 1991) entitled "Anthropology, AIDS, and Sex."

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Part III

Historical Development of Contemporary Diversity