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The Sociology of Health and Illness

GARY L. ALBRECHT

Heath is a metaphor for well-being. To be healthy means to be of sound mind and body; to be integrated; to be whole. Over time and across societies, influential theorists have emphasized that health consists of balance, of being centered (Antonovsky, 1979). The concept of health can be applied to human parts, as when we say, 'Your mother has a healthy heart' or 'Your father has a healthy psyche' (Ferreira et al., 2001). More generally, health refers to a holistic notion of individual well-being (Goldstein, 2000; Roose et al., 2001). We indicate this by relating that 'Samantha is a "healthy" person' or 'She is in good health'. By extension, the concept of health is attributed to families, communities and nations (Rubinstein et al., 2000). When we say that 'They are a healthy people', we use a metaphor to imply that this group has a balance, coherence, and that they can be trusted.

One's perspective on health is oriented by cultural values (Gilman, 1995). For example, contemporary Western medicine evaluates the health of a body organ or individual through a series of technological laboratory tests used to determine if indicators of structure, such as readings of radiographs, and function, such as kidney filtration rates, fall within a 'normal' range for this individual in these circumstances. If the tests individually and in conjunction suggest that everything is as expected,

the physician concludes that 'You are in good health'. Other societies impute health to the community. If there are reports of an individual being out of sorts, the doctor, medicine man or shaman looks for problematic social relationships and how they might be resolved as, for example, among the Yanomamö of Venezuela and Brazil (Chagnon, 1992). In this instance, health ultimately resides outside the individual and is situated in the social structure and relationships in the community or inside the individual expressed through dreams and hallucinations about spirits and ancestors. Health is reflected in shared values and membership in the community and in a perceived being at peace or at least feeling in control of a conflict. The worst fate for members of a community in any society is to be ostracized; to be excommunicated from the group. When this occurs, people lose their sense of integrity and belonging. Health also resides in the environment. When we speak of a healthy environment, we refer to the atmosphere of human rights, including work, and freedom of expression as well as clean air, adequate water and a sense of security. This is expressed in epidemiological models in terms of the host–environment interaction.

By contrast, illness refers to imbalance. Something is out of sync. This can be understood in terms of judgments about what constitutes

the normal and abnormal (Lock, 2000). These judgments are made in terms of biomedical tests, individual perceptions of 'I don't feel well' and the social construction of the abnormal. Like the analysis of health, an examination of illness can take place on the level of the diseased organ, the individual, the community or the nation. While discussions of pathology dominate the medical literature, social scientists point out that illness is culturally constructed and closely associated with the dominant social, political and moral order (Turner, 2000). Their argument is that regardless of the organic basis of disease, the cultural context and interpretation of illness has profound implications for an individual's sense of well-being and perceived attribution of responsibility. When we say, 'He is sick', we employ a rich metaphor which means much more than the person has been judged to have an organic pathology determined by biomedical tests. We mean that the person is out of balance judged from our perspective. But, that is the point. From whose perspective? Based on whose norms and values?

This chapter explores how the sociology of health and illness helps us better to understand people's place and interactions in society and the manner in which social expectations shape our judgments. I begin by looking at key philosophical questions in historical context and in a cross-cultural framework that undergirds debates in the sociology of health and illness. I will then identify and examine some major fault-lines in the sociology of health and illness. Next, I will point to some of the major advances made in the field and indicate what important work is currently being done. Finally, I will consider what questions need to be addressed in the future and why.

PHILOSOPHICAL QUESTIONS UNDERGIRDING THE SOCIOLOGY OF HEALTH AND ILLNESS

The sociology of health and illness developed in a historical context attempting to understand how social and cultural factors influenced the distribution and understanding of

disease, responses to illness, the evolution and operation of health care institutions and development of social policies (Aneshensel and Phelan, 1999; Berkman and Kawachi, 2000; Albrecht et al., 2000; Bird et al., 2000). Many of the fundamental questions addressed were earlier raised by philosophers, healers and revolutionaries (Porter, 1999). Without attempting to be exhaustive, some of these issues are:

- What are the bases for theories of health?
- What is the relationship between the body, mind and spirit?
- How do theories of health imply systems of healing?
- Who is the appropriate healer and what does the healing?
- What is the profession of medicine?
- In medicine, what is the relationship between knowledge and power?
- How should the delivery of health care be organized and paid for?
- Does every citizen have a right to health and to life?

Theories of health have been based on imbalances in the body, in the person or in social relationships. The great healing systems of India, China and Europe, for example, are based on the analysis of and interventions in such imbalances. Ayurvedic medicine is based on the Hindu belief that the body contains three elementary substances representative of the three divine universal forces they call spirit, phelem and bile. These forces are comparable to the Greek 'humours' of blood, yellow bile, black bile and phlegm grounded in the four elements of fire, earth, air and water. In traditional Chinese medicine, there is a dualistic cosmic theory of the yang (the male force) and the yin (the female force). The body is made up of five elements: wood, fire, earth, metal and water. In these systems, specific illnesses were attributed to an inordinate amount of one force, element or humour. For instance in the Greek system, colds in the winter were due to phlegm and diarrhoea in the summer to bile. In these three theoretical systems, health depended on preservation of balance between these forces and it was the task of the healer to bring these forces into equilibrium.

In a review of ethnographic data from 139 societies intended to sample the world's cultures, Murdock (1980) argues that an understanding of illness, and by implication of health, across cultures can be based on theories of natural and supernatural causation. According to Murdock (1980: 9), theories of natural causation consist of 'any theory, scientific or popular, which accounts for the impairment of health as a physiological consequence of some experience of the victim in a manner that would appear reasonable to modern medical science'. Natural causation explanatory frameworks include theories of infection, stress, organic deterioration, accidents and overt human aggression. The germ theory of disease, for example, which drives Western scientific medicine would fall under a natural causation model emphasizing infection. There may, however, be some overlap between the subcategories of the natural causation explanatory paradigms.

The theories of the supernatural causation of disease and health rest on assumptions that scientific Western medicine does not recognize as valid. According to Murdock's (1980: 17–27) analysis, there are three general types of theories of supernatural causation: theories of mystical causation, theories of animistic causation and theories of magical causation. Theories of mystical causation are 'any theory which accounts for the impairment of health as the automatic consequence of some act or experience of the victim mediated by some putative impersonal causal relationship rather than by the intervention of a human or supernatural being' (Murdock, 1980: 17). Some examples are the notion of 'fate' among the Romans and the breaking of food or sex taboos among the Thonga. Theories of animistic causation are 'any theory which ascribes the impairment of health to the behavior of some personalized supernatural entity – a soul, ghost, spirit or god' (Murdock, 1980: 19). An example is the concept of soul loss among the Tenino Indians of Oregon State in the United States. Theories of magical causation are 'any theory which ascribes illness to the covert action of an envious, affronted, or malicious being who employs magical means to injure his victims' (Murdock, 1980: 21). An example is the concept of the 'evil eye' invoked in Mediterranean cultures to explain illness and death. Each of these theories deals with the issues of:

- Agency: Who or what is causing the illness or preserving health?
- Social role: What is the role expected of the patient and of the healer?
- Symbols of knowledge, power and healing: What is the knowledge base of the healer? What symbols distinguish the healer from others in the community? and, What does purging by sweating or colonic therapy mean?
- Structure, process and outcome: Where should one seek help when ill? How does the healing take place? and, How should the healers be treated if they succeed or fail in their endeavors? (Ackerknecht, 1971; Porter, 1999).

Murdock (1980: 88–95) found that nearly 80 per cent of his sample had a notion of mystical retribution expressed through a sense of sin; the belief that acts in violation of some taboo or moral injunction would be followed by punishment of the individual or group. Guilt often accompanied this sense of sin. Malinowski (1944, 1948) made a major contribution to our understanding of theories of health and help-seeking by analyzing how individuals seek help for illness or seek to restore balance when things are out of sorts. In his examination of the workings of magic, science and religion, Malinowski concluded that individuals seek help for maladies according to their cultural and societal frames. What they have learned and experienced gives meaning to and a sense of control over their illnesses. Malinowski and others also discovered that people can use multiple frames of reference in understanding disease and seeking help. For instance, among the Wakomba of Kenya, individuals would often seek help from their medicine man if they were 'sick'. But if that did not work, they might visit a health clinic to try Western scientific medicine delivered through a colored pill or injection by a doctor in a white coat. If the intervention of the medicine man and the doctor did not work, they might turn to their indigenous belief system or to

the Christ of the missionaries. Often these approaches for help and interventions are commingled, with no one healer knowing that the others are being simultaneously invoked. The problem that then often arises is who is to be credited if the individual is cured and who is to blame for failure? These same issues play out in Western culture when people seek help from scientific medicine, alternative therapies such as herbs, acupuncture and spas, and traditional or 'new age' religions. For all of the emphasis on scientific medicine, there is substantial evidence that people are using syncretic approaches to explaining health and seeking well-being. Thus, while there are continuous collisions between the proponents of explanatory models of health, people who do not feel 'well' explore a wide range of treatment alternatives in searching for health. This reality portends that there will continue to be a struggle over knowledge and power in health care belief and delivery systems. Ultimately, power, control and money are at stake. These will play out differently according to history, culture and resources.

FAULT-LINES IN THE SOCIOLOGY OF HEALTH AND ILLNESS

The sociology of health and illness has reached a stage of maturity built on over 100 years of work. An assessment of the field provides a satisfaction with the many concepts, theories and findings that help us better understand the place of health and illness in society. At the same time, there is an unease with many unresolved contentious issues, the inability of theory to explain much behavior and the gap between knowledge and practice. One way to examine these issues is to concentrate on the fault-lines in the field; to focus on the deep questions that stimulate debate.

Matters of perspective

Sociologists are masters of the dictum 'It all depends'. In the instance of the sociology of health and illness, one's view of the world does depend on one's perspective. While there is clear acknowledgment that we live in global society, intellectuals and political leaders are struggling to make sense of the new world order (Giddens, 2000). In terms of the sociology of health, it is presumptuous that knowledge of health, illness and medicine generated in North America, Europe and Japan is applied with such ease across those societies and around the globe. Knowledge produced on 11 per cent of the world's population by researchers and clinicians is assumed to be applicable with little interpretation to the rest of the world. Even those studies done in the Third World are typically mounted by Western scholars who are in the field for a limited amount of time or by denizens of the Third world who have been educated and work in the industrialized world. Because of the way knowledge is produced and marketed, a major problem of external validity and generalization exists.

A second disconnect in perspective concerns the inequalities in health experienced within and between countries. There is a persistent finding that differences in social class, gender and racial/ethnic groups account for substantial differentials in access to health care, active life expectancy, morbidity and mortality (Andersen, 1995; Crimmins and Saito, 2001; MacIntyre, 1997; Marmot et al., 1995). Such differences are even more exaggerated between the rich and the poor nations. As Amartya Sen (1999) argues, health and development are representative of freedom. After years of observing the practice of medicine and public health efforts among poor communities in the United States and in numerous countries in Latin America, Waitzkin (2001) concludes that inequalities in health are not just a result of social class position and access to resources but are part and parcel of the underlying political economic forces that evaluate people based on their education, ability to work, citizenship and political power. Again, it is the powerful health care institutions, medical professionals, international pharmaceutical companies and governments that produce research findings and decide how scarce resources should be distributed. In few instances are the voices of the poor and disenfranchised heard in this process.

A third difference in perspective among those who study and intervene in the health arena involves the insider–outsider stance of the observer. Much medical and health care research in industrialized countries is sponsored by governments or businesses such as pharmaceutical companies who have considerable vested interests in the outcome of the research or demonstration projects. Within sociology this conflict in perspective has been characterized by the sociology *in* and sociology *of* medicine positions. The sociologists in medicine typically worked in medical settings and had their salaries paid by medical schools and health care providers. The criticism was that these researchers would be compromised by being co-opted by the 'system'. Sociologists of medicine were those scholars housed in behavioral science departments of universities who did not have a financial interest in the institutions of medicine. Therefore, the logic went that they would be more objective observers. Critics countered that these scholars were but part-time visitors who did not work in nor deeply understand the internal working of the health care enterprise. In fact, both perspectives have produced valuable work over the years and today, the distinction, while appropriate, does not fully capture the complex worlds of those doing health care research. It is difficult to be entirely in one camp or the other.

A fourth difference in perspective concerns the question one is asking and the approaches one takes to answering the question. In parochial terms, the debate is often couched in qualitative or quantitative approaches to gathering evidence. American social science approaches to health have typically used quantitative approaches to gather epidemiological, survey, clinical trial and outcomes data to describe structure, process and outcomes. The key questions are:

- What is the health of the population?
- What are the determinants of health?
- How can society intervene to improve the health of the population given limited resources?
- How can evidence shape salutary social policies?

While there has been extraordinary epidemiological and health services research in Europe, much scholarly work in the UK and on the Continent has also sought to understand the meaning of health and medicine. Thus, the influence of Durkheim, Mannheim, Foucault and Habermas has been on understanding what accounts for differences in health outcomes not just from an empirical but from a deeply theoretical perspective. While there is overlap, Sol Levine contrasted the American approach as 'structure seekers' and the European version as 'meaning seekers'. Clearly both perspectives are needed (Bloom, 2000; Chard et al., 1999).

Pragmatism

Pragmatism had a formative influence on the development of medical sociology, particularly in the United States, because it provided a conceptual framework for thinking about issues of health and illness and indicated the types of data and analysis that should be used to construct arguments. Pragmatism signifies a fault-line in the study of health and illness because of its epistemological underpinnings, concern with 'scientific method' and focus on applied and policy-oriented investigations. Not everyone was to agree with this predominantly American approach to the study of health and illness because other scholars placed more of a premium on generating over-arching, explanatory theories; valued the generation of knowledge for knowledge's sake; and were more interested in the meanings of facts than in the facts themselves. As a consequence, there are different intellectual approaches to the study of health and illness depending on one's epistemological predilections, notion of what constitutes 'scientific' inquiry, values, ideology, applied versus theoretical orientation, and the historical and cultural context of the investigation.

Pragmatism is a style of philosophy introduced by Charles Sanders Peirce (1839–1914) and William James (1842–1910) which powerfully shaped the work of Dewey (1859–1952) and Mead (1964/1934) in the early twentieth century and the more recent contemporary philosophical work of Quine (1969), Putnam

(1978), Rorty (1991), Haack (1993) and West (1999). Because of its multiple formulations, it is difficult to characterize the work of all pragmatists under one conceptual umbrella. However, in seeking a common understanding of this approach, Susan Haack (1996: 643) asserts that pragmatism 'is best characterized by the method expressed in the pragmatic maxim, according to which the meaning of a concept is determined by the experiential or practical consequences of its application'. The early pragmatists were attracted by the idea of certainty and formulation of scientific laws that had practical applications. Peirce, for example, reacted to the *a priori* methods traditionally favored by metaphysicians by arguing for a scientific method where the inquirer is ready to 'drop the whole cartload of his beliefs, the moment experience is against them' (Peirce, 1931–58, Vol. I: 14, 55). This approach to scientific method is compatible with Popper's principle of falsification whereby theories are proposed and submitted 'to the severest test we can design' (Popper, 1972: 16). The appeal of this version of the scientific method is that it emphasized objective knowledge and universality; truth lay in tested laws and in the 'facts'.

William James espoused a different flavor of pragmatism. He stressed *praxis*, the practical consequences of believing in a particular concept or social program. In considering the intricacies of metaphysical and moral questions, he says, for instance: 'The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences' (James, 1907: 28). He also acknowledged that there might not be conclusive scientific evidence to settle every disagreement. Therefore, he accepted that 'religious beliefs' which in principle cannot be verified or falsified are often used to make strategic decisions because they fit with the believer's life and have practical consequences. He further recognized that 'truth' is socially constructed and can change over time. Both his acknowledgment of 'religious beliefs' and the social construction of truth laid the foundation for explorations of the subjective meanings of experience.

Pragmatism influenced the development of the sociology of health and illness in three

ways. First, pragmatism inculcated in sociologists an early interest in gathering 'objective' data through observations, surveys and censuses that would describe social phenomena and help develop predictive models to test arguments. Second, the pragmatists, exemplified by William James, encouraged the anchoring of analysis in practical realities and social policies. James laid the foundations for grounded theory, the study of social problems, observing behavior in the 'real world', formulating social policies and testing their effects on society. Third, the evolution of pragmatist thinking moved away from the strict 'objectivism' and application of the scientific method advocated by Peirce towards an appreciation of the importance of subjective experience, relativistic and culturally different conceptions of behavior, and paradigm shifts in the gathering and interpretation of behavior. In reviewing a broad range of pragmatic positions, it is noteworthy that in spite of their differences, pragmatists coalesced in their emphasis on attending to how knowledge is generated and that it be evaluated in terms of practical utility.

These themes recur in the current work on health and illness that focus on outcomes research and evidence-based medicine. For example, Donabedian (1980, 1981) and subsequent health services researchers (Andersen, 1995) made important distinctions between structure, process and outcome in evaluating the effectiveness of health care interventions, be they on the patient, community or societal levels. Structural measures primarily reflect the organizational and economic structures within which health care is delivered and the personnel who provide the care. Some examples are the practice of managed care in the United States delivered in for-profit and not-for-profit environments by specialized physicians and the National Health Service model in the UK, which is organized and financed by the British government and delivered through widespread use of primary care physicians and nurses. Process measures of health focus on what is done to patients. These would involve the use of treatment protocols detailing what should be done for a particular condition or circumstance, such as when to do a caesarean section

in delivering a baby or when to intubate a patient in respiratory distress. Outcome measures focus on the results of health care intervention. Some examples are changes in days of work lost or death due to influenza as a result of preventive vaccinations or reduction in mortality rates due to coronary artery bypass surgery.

Outcomes research is particularly popular among those clinicians and policy-makers who are trying to improve access, maintain quality and control the costs of care (Stevens et al., 2001). Managed competition, health maintenance organizations (HMOs), preferred provider organizations (PPOs) and national health insurance are all organizational strategies to strike an efficient and effective balance between cost, access and quality (Sullivan, 2000). An example is an examination of how the lack of health insurance ultimately influences the overall health of the elderly (Baker et al., 2001). Outcomes research is a research paradigm designed to test whether these forms of organizational interventions achieve their desired objectives (Cone, 2001).

Evidence-based medicine is a related effort to base clinical practice and social policy on evidence accumulated through previous experience and research. A pioneer in this enterprise, David Sackett, defines evidence-based medicine as 'the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients' (Sackett et al., 1996). By extension, evidence-based medicine is also used to develop and implement policies on the community or population levels. Health technology assessment likewise is an attempt to measure the impact of technological interventions on health outcomes, costs and quality of care. These two approaches use clinical trials and population-based surveys to determine whether particular courses of action, like population-based inoculation efforts for Anthrax and smallpox in light of the threat of biological terror, are sensible strategies.

An enormous body of work in the sociology of health and illness is not so patently pragmatic but is intent on understanding what it means to be sick, to have a chronic illness or disability, to be a woman, to experience fertility and menopause, to be poor, a member of a minority group and in need of health care and social services (Albrecht et al., 2000; Bird et al., 2000). Here the emphasis in the analysis is less on pragmatic outcomes and more on developing an understanding of health and illness, building concepts and forging theory. The fault-line here lies in the type of questions being asked, the methods used to collect data, the political economy of the research process (who is funding the work and for what purpose?) and the intended use of the studies.

Partitioning the person and holism

Based on persistent philosophical questions of epistemology and ontology, there has been an ongoing struggle in the sociology of health to understand the interrelationship of body, mind and spirit. The philosophical origins of this discussion concern the place of the body in analyses of health and illness. The discussion raises two over-arching theoretical sets of issues: deciding on a unit of analysis and positioning the body in the individual in relation to mind and spirit. Turner (1992), Seymour (1998) and Shilling (1993, 2001) review the historical foundations of this intellectual work from the Greeks, through Western philosophy to contemporary sociological theory. The arguments revolve around cultural context, perspective and meaning. Cultures that emphasize the importance of the community deal with individual bodies as being constitutive parts of the larger society. Sociologists generally take this larger, structural view of the body in analyzing how societies define, represent and control bodies. On the other hand, cultures that place strong value on the importance of the individual deal with the body as an essential element belonging to and under the control of the individual. In terms of perspective, the body is conceived of as being both subject and object and by extension as a cultural subject or a cultural object. In this instance, importance is given to the body in terms of valued personal experiences, utility in sport and military terms or in its representation through size, shape and dress. From this viewpoint, the

body also has considerable symbolic meaning expressed in judgments about fertility, pleasure or threat to society posed by deviancy. Social psychologists and cultural studies scholars generally explore these issues.

Research in the health arena reflects these larger theoretical issues and perspectives. There is a chasm between those who study physical health and disability and those who focus on mental health and emotions. Those interested in the spiritual dimensions of health and illness including belief in a higher being, ultimate meanings of existence, hope and feelings of detachment and peace are regarded with suspicion by those grounded in the 'science' of the body (Wuthnow, 1998). Furthermore, epidemiologists, demographers and macro-level sociologists examine the interrelationships between social variables like age, race/ethnicity, sex, gender and social class on health status and outcomes while clinicians and social psychologists concentrate on individual organisms, diseases and health behaviors. As a consequence of choosing one's level of analysis and perspective, these different brands of investigators rarely talk or listen to each other and define health and illness quite differently among themselves.

One is left with the persistent problem of the whole and the parts. What is the object of our study of the body in the context of health and illness and how are these fragmented perspectives ever to be integrated? In fact, these problems are becoming more acute with the growth of the field of human genetics, the increased use of biological interventions in the body and increasing use of replacement parts like mechanical hearts. Reactions to this Balkanization of the body include a burgeoning of interest in holistic health, spiritual healing, a re-examination of the meaning and value of life and mind–body–spirit inter-dynamics (Albrecht and Devlieger, 1999).

Professions, organizations and institutions

Concurrent with the controversies regarding approaches to analyzing personal and community health have been dramatic changes in the way that we conceptualize health care professions, organizations and institutions. The beginning of the twentieth century witnessed the professionalization of medicine when a broad range of health care practitioners such as homeopaths, chiropractors, naturopaths, osteopaths and allopaths employed a curious mix of interventions including blood letting, application of mercury, colonics, manipulation and surgery to cure illnesses. After a period of sorting out which treatments were thought to bear scientific merit, a re-evaluation of medical training occasioned by the Flexner Report and legal and licensing struggles, allopathic medicine in Western nations was legitimated, achieved dominance and was recognized as a profession (Starr, 1982).

In the mid-century the profession of medicine was the standard by which all other professions were judged. According to Goode (1960: 903), a profession (here read medicine) had two core characteristics: 'a prolonged specialized training in a body of abstract knowledge and a collectivity or service orientation.' Five additional characteristics were derived by Goode from these two foundational principles:

- The profession determines its own standards of education and training.
- Professional practice is often legally recognized by some form of licensure.
- Licensing and admission boards are manned by members of the profession.
- Most legislation concerned with the profession is shaped by that profession.
- The practitioner is relatively free of lay evaluation and control.

In a masterful analysis of the profession of medicine, Freidson (1970) showed how medicine was institutionalized, became specialized, generated knowledge based on 'science' and clinical practice, accumulated and exercised power, socially constructed illness and remained among all potential competitors the legitimate profession deemed competent to and worthy of being paid to treat illness. For years, the institutional power of medicine was not seriously contested in Western countries (Abbott, 1988).

Considerable forces arose, however, in the later third of the twentieth century to challenge the status quo of medicine's knowledge, power and form of practice. After the mid-century, medicine increasingly began to be practiced in groups with peer review and accountability (Freidson, 1975). Then, as medicine became even more technological, it began to resemble an industry with business-like concerns such as optimizing the division of labor, selling new products, expanding into new markets, preserving income and maximizing return on investment (Albrecht, 1992; Light, 2000a; Starr, 1982). The traditional profession of medicine was simultaneously challenged by the twin forces of deprofessionalization and corporatization (Weiss and Fitzpatrick, 1997), first in the United States and then in the UK and in other parts of the world. Consumers began to become more assertive in terms of the care they desired and where they sought it. Physicians increasingly began to work for corporations or the state which demanded more accountability and threatened their autonomy. These changes called for a political economic analysis of health care professions and markets.

Light (2000b) typified this change in professional practice, power, climate and setting in terms of a model of countervailing power. In this framework, the knowledge and power of medicine is counterbalanced by other powerful actors in the health care marketplace including the buyers and sellers of services and products, corporations who now employ substantial numbers of doctors, the government who employs physicians and pays for treatment, insurance companies and the more informed consumer. This fault-line in the sociology of health and illness concerns the theories and practice used to explain the definition of health problems, organization of health care delivery, control of knowledge, power over the consumer and marketplace, consumer actions and guardians of the health of the public. Changing times required new perspectives and models (Ardigó, 1995).

Alterations in the practice of health care have had equally dramatic effects on organizations and institutions in the medical arena. In a careful analysis of the changes in health care environment, institutions and organizational change that have occurred in the past 25 years, Scott et al. (2000: 360) point out that adoption of managed care has produced heated competition and the unleashing of market forces in the health care arena. As a consequence, 'Governance structures have become more fragmented. … The coherence of organizational boundaries has been greatly reduced. … Practitioners and patients alike are confused. … Consensus about institutional logics has been reduced.' Changes in institutional rules and behavior change such as occurred under managed care produce 'disagreements and disputations over the priorities and goals of the sector and lack of agreement on the appropriate means to be employed in reaching them' (p. 359). Light argues that institutional theorists are able to document changes in the profession of medicine, organization and practice of medicine but are not able easily to explain why this has occurred. In response to this challenge, Light elaborated the theory of countervailing powers to assert that the very dominance of the medical profession evoked reactions from governments and consumers and that the very size of and potential profits in the health care business enticed health care corporations, insurance companies and lawyers to enter and attempt to control the business (2000b). Different approaches to understanding the profession of medicine and health care organizations and institutions demonstrate the theoretical struggle to understand changes in health care institutional dynamics over time (Turner, 1995; Williams, 2001).

Health as a value

The last fault-line centers on the symbolic meaning and value of health, for discussions of health and illness are ultimately based on assumptions about human worth. These assumptions and arguments about human worth have particular relevance to research and social policies towards vulnerable populations like women and children, the elderly, the poor, the inadequately insured, disabled people and those with chronic and/or incapacitating

illnesses. In practice, vulnerable populations generally share more than one of these characteristics, increasing their vulnerability and risk of poor health status, low quality of life and even death (Ayanian et al., 2000). While scholars agree that their research on health issues has serious implications for social policy, they often skirt direct examinations of the values, morality and ethics undergirding their work or in the application of their results to social policy. Some researchers believe that they should explore specific issues for knowledge's sake alone while others gather data to argue for specific social policies or undertake research to evaluate the interventions suggested by certain social policies. In any event, there are fundamental questions based on values which are subsumed in all research on health – What is health? Is health a human right? Does every person have a right to health care? Who has the responsibility to provide and pay for health care? Are some people more deserving of health care than others? When is it appropriate to not provide health services? Do members of a community have the responsibility to provide care for all members of their community or for other communities? If so, how much care and under what conditions? – and not all researchers, politicians or moral philosophers agree on the answers to these questions (Blendon and Benson, 2001).

Decades of research on the cost/access/quality trade-off problem in health care in Western countries gave rise to behavioral models of access to medical care, market models that regulate the amount, type and quality of care and ethical arguments about health as a human right (Albrecht, 2001; Andersen, 1995). Aday (2000) added depth to the argument by probing the three philosophical paradigms that ground debates on justice and health equity: distributive justice, social justice and deliberative justice. Distributive justice pertains to health care by applying the principle of need to the allocation of health benefits: 'Integral to the framework is the value judgment that the system would be deemed fair or equitable if need-based criteria, rather than resources (such as insurance coverage or income), were the main determinants of whether or not,

and how much, care is sought' (Aday, 2000: 483). Social justice speaks to establishing and supporting a public health infrastructure and population-based health interventions that will prevent disease and protect those most vulnerable in the society. These efforts are usually undertaken and supported by governments and the state. Shortell et al. (1996) argue that such broad-based, national health care systems in European countries account for their better life expectancy and infant mortality rates than the United States, where a much larger proportion of the gross national product is spent on health care. Deliberative justice is grounded in community participation and empowerment of the people affected by health policies in designing health care systems and programs. Such a paradigm enlightens the State of Oregon's approach to allocating scarce health resources and the World Health Organization's Health Cities and Healthy Communities initiatives in organizing health care in developing countries (Ashton, 1991). This deliberative justice approach is concordant with Sen's (1999) assertion that health is an essential component of economic development and of freedom.

Arguments about the inherent social values shaping research and the allocation of scarce health resources are proposed as the critical issues in global health by Koop et al. (2001). They point out that the application of differential values to the organization and delivery of health services dramatically affects such outcomes as demographic destabilization, accelerating disparities in national development, persistent under-attention to the vulnerabilities and capabilities of girls and women, reliable sources of clean water for the world's population and disposal of waste, and attention to public health problems such as obesity and malnutrition. Likewise, Feagin (2001), in re-focusing attention on the implications of sociological research for social justice, implies that serious attention should be given not only to the social problems before us but to the value systems underlying different intervention strategies and likely outcomes of these different strategies. This is an area of keen debate and one in need of more serious thought.

MAJOR CONTRIBUTIONS OF THE SOCIOLOGY OF HEALTH AND ILLNESS

The fault-lines in the sociology of health and illness tell us where lively debates on over-arching issues are occurring but I would also like to draw attention to some major advances in the field and indicate what specific work is being done. On the social psychological level, Mechanic has extended the early work on the sick role to consider illness behavior and what constitutes trust. Parsons (1951) made a major contribution in identifying the components of the sick role in terms of what was expected of the patient. Over the years, others criticized and expanded this model to include expectations of those with chronic illnesses and disabilities. Mechanic (1962) made contributions in considering what it meant to be ill and how one experienced and expressed illness. This work led him to reconsider the doctor–patient relationship and, on a more macro level, what illness meant in society. This stream of research has laid conceptual building blocks and theoretical foundations that make discussions of trust and social justice more sophisticated. As Mechanic (1989) points out, trust is the social glue that makes diagnosis and treatment possible on the individual level and social policy possible on the community and societal levels.

On the organizational level, studies of national health care services, multiple hospital systems, assisted care facilities, hospices, support groups for those with HIV/AIDS and the environment within which these organizations operate have led to important findings about how the organization of health care directly impacts the cost, access and quality of care. This work is now expanding to important sets of cross-national studies that are examining the essentials of effective health care systems, how different organizational models may produce similar results and how the mix of populations served interact with the organizational structures of the delivery system to yield variable results. In other words, the organization of health care needs to be tailored to the needs of the population and local culture and environment. That is why there is persistent interest in comparative health care system research between Scandinavian countries, other European countries, the UK, United States, Canada, Cuba and Japan.

Inequality in health has also been a dominant theme of the sociology of health and illness which has evolved from a consideration of differences in behavior and material circumstances to a complex consideration of how health behaviors and material and social resources interact to produce differences in health outcomes both on the individual and community levels. Researchers in this area have illustrated the importance of social capital in dealing with health issues. Social capital refers to the social resources and networks available to individuals that help them define and cope with health problems. Consistent findings show that larger amounts of social capital are predictive of less disability, more support and a higher quality of life. Research on social equity has also highlighted the need to do multi-level analysis; to consider individuals in their environments and as members of a community and nation. Each layer of relationships is likely to explain some of the health outcomes and considering individuals in context permits a more fine-grained analysis of health and disease realities.

Health-related quality of life research has directed attention beyond issues of mortality and morbidity to how people are living (Levine, 1987, 1995). This concept is applicable across the lifespan and groups of individuals. Investigations into quality of life have led to important distinctions between objective and subjective indicators of well-being. Albrecht and Devlieger (1999) discovered, for example, that there was a disability paradox raised by the apparent discrepancies between the quality of life of disabled people as perceived by the general public and those living with the disability. About 50 per cent of the people with serious and persistent disabilities in the study reported that they had a good or very good quality of life even though outside observers might deem otherwise. This type of result suggests that clinical and policy decision-makers need multiple sources of data to understand the desires, wants and experiences of vulnerable and disabled people. As a consequence, quality of life

is being incorporated into most judgments of treatment outcomes. Much progress is being made in this area.

This work on health-related quality of life has also drawn renewed attention to the concepts of normalcy and deviancy (Phelan et al., 2000). The women's movement and interest in international health have illustrated how white male norms established at one point in history in postindustrial countries do not serve as useful reference points for the behavior of all people. The acknowledgment of incredible diversity in the distribution and experience of illness and disability have turned the discussion away from that of normalcy to that of the appreciation of difference. As a consequence, the meaning and experience of health are being redefined. Most research has been traditionally done on men by men and for men. Yet, recent research clearly demonstrates that women's health experiences and issues are different from those of men, requiring considerable changes in the conceptualization and delivery of health care for women and children. In fact, one of the major factors in improving the health of a nation is to educate women and make health resources available to them, for women are usually the people who care for children, older parents and disabled people.

FUTURE TRENDS

We now turn our gaze to where the field is going. Research on health and illness has become increasingly interdisciplinary in theory and scope and is utilizing prospective, longitudinal designs to address complex questions about the interaction between different sets of variables. This has heated already contested issues because traditional boundaries have been broken and ownership of parts of the person or of the problem have been challenged. These issues question the knowledge base and power of a discipline. As a case in point, consider the boundaries between the social, the cultural, the biological and the medical aspects of health and illness. For years there were debates over the relative power of

nature or nurture in explaining mental illness, heart disease, cancer, strokes and disabilities. Other research investigated the cultural and institutional contexts of health and illness, producing such theories as the stigmatizing effects of labeling people sick or deviant or of attributing the effects of isolation and institutionalization to an illness not to the social consequences of institutionalization. Further research examined illness in different cultural contexts to ascertain whether or not the 'deviant behavior' was symptomatic of an underlying illness or rather a manifestation of cultural differences.

These questions take on a renewed importance in this age of the new genetics, stunning advances in knowledge about the biological bases of illness and a sharper understanding of the interaction between the genetic and organic components of human beings, their group memberships and environments. For instance, there is accumulating evidence for a genetic basis of Parkinson's disease (Scott et al., 2001). Breast cancer is now known to have genetic, lifestyle and environmental determinants (King et al., 2001). The study of twins offers a powerful design to tease out the differential effects of nature versus nurture on behavior. Goldberg and his colleagues (1990), for example, compared over 2000 military men who served in heavy combat roles in Vietnam to their identical twin brothers who saw less intense action. Those twins who experienced the heavy combat were nine times more likely to report medical symptoms such as stress and battle fatigue syndromes, flashbacks, nightmares, inability to sleep and problems controlling their tempers than their brothers.

Udry (1994, 2000) and Udry, Morris and Kovenock (1995) have caused lively debates over the biological and social construction of gender through their biosocial research on gender. In a number of longitudinal cohort studies beginning in the 1960s, Udry (a sociologist-demographer) and Morris (a physician) collected blood samples to measure hormone levels and other biological factors and simultaneously gathered a host of demographic, social and behavioral data. The general thrust of the findings from many studies based on this approach is that *both*

biological and social variables explain gendered behavior in these samples and that both sets of variables independently and in interaction explain such behaviors as delinquency, dating behavior, age of marriage and fertility. They conclude from this body of work that both sets of variables ought to be considered in explaining health, disease and many social behaviors, that there are biological limits to the social construction of gender and that there is a need for the development of sophisticated biosocial models of behavior. Feminist scholars attacked this work calling it 'neuroendocrinological determinism' (Miller and Costello, 2001) and conceptually and methodologically deficient (Kennelly et al., 2001; Risman, 2001). Udry responded to these criticisms:

> Sociologists are very diverse in their theoretical orientations. Some of us work within paradigms that are incompatible with paradigms used by other sociologists, even though we suppose we are working in the same domain – in this case, the study of gender. … Paradigms with different perspectives are not necessarily mutually exclusive. I can live with the critics' paradigm. But can they live with mine? (Udry, 2001: 616)

Similar approaches are being employed in studies of organizational behavior. Arvey and Bouchard (1994) summarize a body of research on genetics, twins and organizational behavior. The general conclusion is that there are numerous studies illustrating that biological and heritable factors do interact with work and organizational variables to explain job attitudes, satisfaction, interests, performance and tenure.

The interplay of biological and social variables is also evident in the examination of the effects of the environment on health and illness. In reviewing this work, Masters (2001: 345) concludes that:

> (a) Developments in genetics and medicine indicate that governmental policies have greatly underrated the dangers posed by radiation and the social transformations that will result from DNA sequencing. (b) Research on brain structures and neurochemistry shows how toxic chemicals undermine normal emotions and behavior. Heavy metal burdens are higher in violent criminals, and exposure to these toxins is significantly correlated with rates of violence (controlling for socioeconomic, ethnic, and demographic factors). (c) An untested chemical used to treat water supplied to 140 million Americans significantly increases both the odds of dangerous lead uptake and behavioral dysfunctions in children and adults. (d) The complexity of gene–environment interactions challenges accepted theories of gender, sociopolitical inequalities, ethnocentrism and history.

This interdisciplinary work threatens traditional academic boundaries and paradigms, intensifies struggles over ownership of a problem, questions existing knowledge and power and raises moral, ethical, and legal issues. Conrad (2000) argues that advances in biology and genetics threaten to intensify the medicalization of human problems accompanied by significant undesirable consequences for people with differences and for social policies. Cunningham-Burley and Boulton (2000) are more sanguine, recognizing that while many problems exist, the new genetics offers untold opportunities for the understanding of health and illness and the practice of health care. Regardless of one's viewpoint, the interdisciplinary approach to health and illness is here to stay and will revolutionize the way that we define, investigate and understand problems. This approach does force scholars to consider the work of researchers in related fields, to develop and test new theory and design studies to tease out the relative contributions of different sets of variables in better understanding health and illness.

At the same time, changes in the shape of institutions and the globalization of health problems are impelling scholars and policymakers alike to focus on the need for supranational institutions that can deal with borderless health-related problems associated with international development, terrorism, HIV/AIDS, the reappearance of infectious diseases and inadequate public health infrastructures. The arguments over income inequalities within and between nations are expressed in terms of peace, equity and justice over the plight of Iraqi children, the AIDS scourge in Africa and Asia, the health of people in the Balkans and the oppression of women and children (Hayward et al., 2000). These issues focus discussion on the meaning of citizenship, health as a human right and health as a moral good. The work of Lane (1991, 2000) and Sen (1992, 1999) is pertinent in this regard. Lane asserts that international markets should be judged not only by

economic growth and profits but by their ability to provide well-being to all citizens. In fact, he argues that we are experiencing a loss of happiness in market democracies due to inequalities in the distribution of wealth and health resulting in want and feelings of insecurity. Sen, in a parallel fashion, points out that freedom is ultimately contingent on equity; on development and citizens' feelings of security, and access to basic material goods and health. More discussions of health and illness will be couched in terms of international security, responsibility and access to the infrastructure and resources that permit a human life.

While this analysis of current thinking about health and illness is not inclusive, it does point to many of the salient issues confronting scholars and policy-makers and points to the future work that needs to be done. May such efforts be energized by the maturation of the field and stimulated by the recognition that we are all interconnected citizens of the world. What happens to others will affect us and vice versa.

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