

ADVANCING HEALTH IN DEVELOPING COUNTRIES

The Role of Social Research

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An Anthropological Approach to Social Science Research on the Health Transition

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When we use the term "health transition," we refer to the dramatic decrease in mortality that the world has seen over the course of the twentieth century, and to the social forces that figure as both causes and consequence of this transition. Also part of the health transition is a change in the distribution of causes of death and in the prevalence of different types of illness. Acute infectious diseases now represent less of the burden of morbidity in developing countries than before, while the proportion of chronic illness (e.g., heart disease, cancer) is on the rise. At the same time, urbanization and other aspects of modernizing social change are bringing with them an increase in psychological disorders and behavioral disorders, such as substance abuse, child abuse, depression and anxiety disorders, and suicide. Thus, we see that the health transition has three essential aspects: (1) an increase in life expectancy, (2) epidemiological changes in the patterning of illness worldwide, and (3) a growth in psychological and behavioral pathology.

Up to now, much of the research designed to illuminate social influences on the health transition has focused upon the impact of macro-level social processes—improved education, urbanization, mass communication, economic development. Here we argue for the importance of incorporating microsocial variables—variables representing patterns of behavior in local cultural settings—into social science research on the health transition. The argument is based on the proposition that events at the local level serve to mediate the effects of large-scale socioeconomic change upon health outcomes. It follows from this premise that any adequate representation of the nature and determinants of the health transition must account for the effects of microsocial processes.¹

As a means of presenting this argument, we have chosen to examine the notion of illness behavior, a descriptive and analytical category essential to the study of changes in health status. The aims of the discussion are threefold: (1) to use illness behavior as a conceptual framework for organizing data on cultural variation in the ways people think about and respond to illness; (2) to demonstrate the importance of including microsocial variables in social research on the health transition by documenting cross-cultural differences in illness behavior; and (3) to outline a few of the implications for research and policy formulation that a focus on illness behavior suggests.

ILLNESS BEHAVIOR

Illness behavior is defined here as that constellation of activities and beliefs exhibited by an individual and his or her social circle in response to bodily indications perceived as symptoms (Mechanic 1978).

In a given individual or social network, illness behavior involves the definition of symptoms, the monitoring of the body (to see if the symptoms change or progress), and remedial or "treatment" action, that is, utilization of lay or professional help to rectify the perceived abnormality. The series of activities aimed at securing treatment for the illness is, for present purposes, termed "help-seeking." Help may be sought from a number of different sources in an individual's social network, including friends, family, folk healers, and biomedical professionals. Home care, or treatment administered by sick persons themselves, their families, and their friends, is also part of the help-seeking process.

Help-seeking culminates in the formulation of a treatment plan, or regimen. The extent to which the treatment plan is carried out by the patient and his or her family is referred to as the degree of compliance.

Illness behavior is also influenced by explanatory models of illness. The term "explanatory model" refers to the patient's and family's conceptions of the nature of a particular illness episode, its causes and effects, expected and/or desired treatment, and apprehensions about the outcome. Explanatory models are grounded in culturally defined systems of meaning, crystallizing out of local beliefs about the nature of the body, of suffering, and of the person. Cultural categories that organize various types of illness and methods of treatment also inform explanatory models.

Explanatory models find expression in particular episodes of illness. They rationalize decisions about what is most at stake and what sort of treatment action should be undertaken. Thus, among North Americans, patients may interpret hypertension as a result of "too much tension" rather than high blood pressure. Consequently, patients who feel tense believe they have the condition, while those who do not frequently

decline to comply with medical treatment regimens out of a belief that they are not affected (Blumhagen 1980).

All aspects of illness behavior vary with culture. Symptoms are perceived, interpreted, and acted upon differently by people in different cultural contexts, resulting in highly distinctive experiences of illness. The following review of research literature on illness behavior in developing societies documents local-level variation in symptom definition, help-seeking, compliance, and explanatory models.

CULTURE AND SYMPTOM DEFINITION

Recognition of symptoms of indicators of illness is essential to the initiation of help-seeking and treatment. Whether or not particular bodily changes will be identified as symptoms, however, is a function of local cultural definitions of disease. To illustrate, let us consider the case of diarrheal illness.

One researcher reports that among rural Sinhalese in Sri Lanka, diarrhea may be defined both as a form of illness and as a sign of imbalance or transition, depending upon the circumstances. The occurrence of diarrhea during natural transitions in the life of an infant (teething, walking, weaning) is interpreted as a normal response to developmental change—a "trouble," not an illness. Consequently, medical intervention is usually viewed as unnecessary in cases occurring under the age of three unless more serious complaints (such as fever, vomiting) are also involved (Nichter 1988). The tendency to define diarrhea as a natural consequence of growing up rather than as an illness requiring treatment has also been observed in other parts of South Asia (Mull and Mull 1988), in Central and South America (Escobar, Salazar, and Chuy 1983; Kendall, Foote, and Martorell 1983), and in Africa (DeZoysa, Carson, Feachem, Kirkwood, Lindsay-Smith, and Loewenson 1984; Maina-Ahlberg 1979). Likewise, in an earlier study in South India, observers noted that children with diarrhea who became severely dehydrated were often not brought for medical treatment. Subsequent interviews with families in the region revealed that although diarrhea itself was considered an individual abnormality that could be appropriately treated using biomedicine, diarrhea accompanied by what (in biomedical terms) are symptoms of severe dehydration (e.g., sunken eyes, sunken fontanelle) was seen not as an illness but as a form of pollution requiring ritual purification. A therapeutic intervention consistent with biomedical and local cultural interpretations was then devised (Lozoff, Kamath, and Feldman 1975).

An awareness of cultural variability in symptom definition also helps to illuminate the pattern of "illness neglect" that has been identified in various developing world settings.

A number of authors have argued that in areas where mortality rates are high and people are generally poor, a fatalistic attitude toward illness prevails. Life is not as highly valued as it is elsewhere, the argument suggests, and people tend to resign themselves to illness, interpreting it as divine punishment or unavoidable suffering that must simply be endured (Cassidy 1980; Scheper-Hughes 1984; Scrimshaw 1978).

An awareness of cultural variation in symptom definition suggests, however, that so-called neglect of the sick may stem not from fatalism, but from (among other things) the definition of particular bodily changes as acceptable, or even normal, in a given setting. In fact, the notion of fatalistic resignation to disease in the Third World has been rejected by other investigators as a form of blaming the victim. Nations and Rebhun, for example, have convincingly countered claims of maternal neglect in Northeastern Brazil by showing that mothers go to considerable lengths to obtain care for their sick children and grieve profoundly when a child dies (Nations and Rebhun 1988).²

HELP-SEEKING

The array of resources from which a sick individual seeks help may be grouped into three overlapping categories, or sectors: (1) the *popular sector*, consisting of families, members of social networks, and patients themselves; (2) the *folk sector*, consisting of traditional healers, and (3) the *professional sector*, meaning practitioners of biomedicine (Good 1987; Kleinman 1980). Our discussion of cultural variation in help-seeking is organized in terms of these three sectors.

The Popular Sector

Where access to professional healers is limited, as it is in much of the developing world, sick people tend to rely heavily on themselves, their families, and other members of their social circle for care.

In examining the dynamics of help-seeking in the popular sector, a number of researchers have chosen to focus on home treatment. In fact, the available data suggest that there may be considerable cultural variation in the extent to which home treatment is used initially or exclusively in coping with illness. Studies carried out in East Asia, Central America, and West Africa showed that 90 percent of urban Taiwanese (Kleinman 1980), 57 percent of poor Salvadorans (Ferguson 1986), and more than 70 percent of mothers in Burkina Faso (Sauerborn, Nougata, and Diesfeld 1989) turned first to home health care. However, other investigators have found the proportion of illness episodes treatment at home to be considerably lower—39 percent in a study in Guatemala (Cosminsky

1987), 29 percent in Sri Lanka (Caldwell, 1989), and 20 percent in Ethiopia (Kloos, Etea, Degefa, Aga, Solomon, Abera, Abegaz, and Belemo 1987).

It is important to recognize that home treatment is usually not the only form of care sought in response to a given illness episode. In most cases, home care is followed by consultation with traditional healers and/or biomedical practitioners. This pattern is illustrated by the results of a recent study of health service utilization in Kathmandu, Nepal, in which patients were found to turn first to home remedies, then to traditional healers, and only finally to biomedical health services for treatment (Subedi 1989).

A paper synthesizing the results of four different studies carried out in isolated rural areas of India and Nepal provides useful comparative data on patterns of self-care in two different developing countries. The proportion of ill individuals reporting use of self-care either alone or in combination with professional treatment over a two-week period ranged from 19 to 42 percent (Parker, Shah, Alexander, and Neumann 1979).³ Reliance on self-care was generally lower in Nepal than in the Indian research sites, but it did not vary by age or sex in any of the studies reported. It is interesting to note that data from North and South India revealed a significant decline in self-care practices over the course of a 10-week period. Reported use of self-care tended to be slightly higher in areas at a greater distance from professional services. Variation in recourse to self-care by type and severity of complaint was also demonstrated.

Finally, it must be recognized that self-medication with pharmaceuticals is becoming an increasingly important aspect of home care. Regardless of how we choose to explain this phenomenon,⁴ western drugs are growing in popularity in many developing countries. Easily available from pharmacists or even local lay personnel (Whyte 1991), these medicines are often misused for self-treatment by the general population, who consume them without benefit of knowledgeable direction or advice (Ferguson 1986; Haak and Hardon 1988). The widespread distribution of pharmaceuticals is promoted by western (and indigenous) drug companies, whose primary interest lies, generally speaking, in maximizing profit.

Social networks are another component of the popular sector from which help is sought in times of illness. In the process of responding to an illness episode, the social network of the affected individual may influence diagnosis of the condition, choice of healers, and provision of care. An entire community may become involved, for example, in speculation about the nature and cause of a given condition, especially when the patient is a child (Crandon 1983). One author coined the term "therapy management group" in an attempt to convey the central importance of the social network for decisionmaking and therapeutic activity in

Lower Zaire (Janzen 1978). Therapy management groups are also important in South India, where their purpose is not only to facilitate optimal treatment but also to manage the distribution of resources. Considerable overt and covert conflict is often involved in this process.⁵

A study of traditional healers in Singapore found that 57 percent of patients using these services were referred to them by family or friends. In the investigation of health services utilization in Nepal cited previously, consultation with family or friends was found to be associated with a longer period between the onset of illness and the decision to seek medical help (Subedi 1989). Finally, for an illustration of the extensive role social networks can play in the provision of care, we may look to data from rural Brazil, where informal adoption of desperate or dying children by members of the community has been reported to be relatively commonplace (Scheper-Hughes 1987).

Another important function of the social network is the provision of social support, which has repeatedly been shown to be related to health status. We know, for example, that the risk of health problems is higher for individuals whose social relationships are few and their quality poor (House, Landis, and Umberson 1988). When social support is lacking, emotional distress may be manifested as bodily complaints. This process has been described in a study of Havik Brahmin women in South Kanara, India, where it is argued that in the absence of adequate social support, personal, social, and organic distress are expressed in a somatic idiom (Nichter 1981).

It is important to emphasize that care received from resources in the popular sector of not necessarily inferior to professional treatment. A mother who administers oral rehydration therapy to a child with diarrhea and dehydration is providing care that is eminently appropriate and often life saving. Other forms of popular treatment may involve dietary changes and special foods, traditional herbs and medicines, cupping and massage, religious practices, and biomedical interventions.

Folk and Professional Sectors

The steady advance of western biomedicine in developing societies means that traditional and cosmopolitan healing systems now coexist in many regions of the world. Thus, the study of help-seeking from folk and professional sources becomes in large part the study of choices between traditional and biomedical practitioners.⁶ A number of different types of factors help to shape such choices. Three of these will be considered here: the type of illness involved, the perceived cause of the illness, and the accessibility of services.

Often, in situations of medical pluralism, a classification system de-

velops to specify which types of complaints should be treated by a traditional healer and which through the use of biomedicine. A study of the use of traditional Chinese medicine in Singapore, for example, showed that this form of treatment was strongly preferred for rheumatism, fractures, menstrual irregularities, and anemia. Chinese medicine was also significantly preferred for diarrhea, worm infestations, influenza, and constipation (Ho Lun, and Ny 1984). In Nigeria, in contrast, traditional healers have been found to be preferred for psychiatric illness, fractures, snake bites, and convulsions (Nnadi and Kabat 1984).

Choices among healers in the folk or professional sectors may also be guided by notions of illness etiology. For example, in rural Ghana, local categories of disease causation define specific illnesses as the result of actions of supernatural agents, natural agents, or both. A study of help-seeking patterns carried out in this region showed that biomedical practitioners were consulted more often than traditional healers for illnesses considered to have natural causes, while for conditions attributed to supernatural forces, the reverse was true (Fosu 1981).

To cite a second and rather different case, researchers studying traditional beliefs and practices related to diarrhea in rural Pakistan found certain types of diarrhea to be represented as particular "folk" illnesses with ascribed causes such as fallen fontanelle or exposure to "envious glances" (Mull and Mull 1988). A systematic comparison of the types of care sought for these two forms of diarrheal illness revealed a clear relationship between attribution to "folk causes" and a preference for traditional healers.

The relative accessibility of traditional biomedical practitioners also plays an important role in determining what type of healer will be consulted. Accessibility is determined by a number of factors, including distance, transportation, waiting time, linguistic barriers, and cost.

In a study of healer choice in a Mexican village, for example, 58 percent of subjects cited problems of access, such as lack of money or transportation, as their reason for deciding not to consult a physician (Young 1981a, 1981b). Similarly, research on physician use in Northern Nigeria revealed that per capita utilization of local government health dispensaries declined steadily as distance to the facility increased.⁷ A recent study of malaria treatment in Africa pointed to lack of access to medications as a major factor in explaining why mothers did not use anti-malarial drugs for episodes of fever in their children and themselves (Glik et al. 1989).

The fact that choices are made between traditional or professional practitioners does not mean, however, that the folk and professional sectors are mutually exclusive. People may seek treatment from both types of health care systems concurrently or sequentially in the course

of a single illness episode, acting out of the belief that traditional healing and biomedicine represent complementary, rather than competing, approaches to health care.

COMPLIANCE WITH TREATMENT

The research literature reporting influences on compliance with treatment in Third World settings identifies different factors in different cultural contexts.⁸ For example, failure to achieve the anticipated response emerged as a major consideration in an investigation of oral rehydration solution (ORS) treatment of diarrhea in North India. Forty percent of study subjects who had tried ORS for diarrheal illness reported that they would not use it again because it did not bring about the effect they expected, namely, cessation of the diarrhea (Bentley 1988). Of course, ORS merely replaces lost fluid; it does not treat the diarrhea itself.

A recent study designed to uncover the reasons behind widespread noncompliance with medical regimens among leprosy patients in Pakistan illustrates the impact of cultural and social factors upon adherence to treatment (Mull, Wood, Gans, and Mull 1989). In this research, a model of compliance that took health beliefs, duration and complexity of treatment, relief of symptoms, and quality of the doctor-patient relationship into account nonetheless proved to be inadequate in that it failed to incorporate a recognition of the social stigma attached to this disease. Leprosy patients who participated in the research reported having been shunned by their neighbors (34 percent), rejected by their families (27 percent), fired from their jobs (19 percent), forced to leave their homes (14 percent), and/or unable to find marriage partners (11 percent). The fact that the majority (54 percent) of noncompliant subjects who were questioned denied having the disease (precluding, of course, the necessity for treatment) is interpreted by the investigators as an understandable response to these kinds of experiences.

In their analysis of fatalism, neglect, and childhood illness in Northeastern Brazil, Nations and Rebhun (1988) describe the local ethical systems that help to guide families in making the decision to discontinue treatment for a child who is considered terminally ill. Severity of symptoms, available resources for treatment, the anticipated burden on family resources that administration of the treatment represents, and the quality of life the child is likely to enjoy if he or she survives are some of the criteria used by parents, in consultation with traditional healers, in making a "decision for death." The authors make a point of articulating the similarities between the Brazilian folk system and its analogue in professional biomedicine.

The data from Pakistan and Brazil make it clear that to construe compliance only as a moral imperative emanating from the biomedical establishment is to miss the important influences of popular moralities upon this aspect of illness behavior. Patients, families, and communities routinely invoke local meanings to evaluate the effectiveness of treatment. Much more needs to be known about how cultural beliefs influence decisions such as whether or not to return to a particular caregiver, where else to go for treatment, or when a particular episode of illness is considered to be over. In short, scientific models of compliance must incorporate a recognition of local moral systems and their behavioral implications, if their purpose is to be well served.

EXPLANATORY MODELS

For an especially clear illustration of cultural variability in explanatory models of illness, we may look again to the data on diarrhea. We have seen that under certain circumstances, in particular cultural contexts, symptoms of diarrhea may not be defined as an indication of illness. In most instances, however, diarrhea is interpreted as illness, and its occurrence is attributed to a wide variety of possible causes. These are summarized in a useful review article by Weiss (1988) to include the following: (1) imbalance of heat and cold in the body (reported in Northeastern Brazil, Honduras, North and South India), (2) bad breast milk (reported in the Philippines, Zimbabwe, Bangladesh), (3) worms (especially prevalent in Latino cultures), (4) supernatural causes (reported in Brazil, South India), and (5) immoral conduct, such as sexual infidelity on the part of an afflicted child's parents (reported in Africa).

A number of different explanatory models for a given illness may also coexist within a single cultural region. Thus, in the study of noncompliance in leprosy patients cited previously, the disease was variously attributed to (1) conflicts or imbalances between hot and cold foods in the diet (47 percent of study subjects), (2) physical causes (such as "bad blood" or "germs"—28 percent), (3) environmental forces (cold weather, hot weather, winds—20 percent), (4) emotional and magical causes (evil eye, being cursed, feeling proud or angry—3 percent), and (5) the will of God (16 percent) (Mull, Wood, Gans, and Mull 1989).

The culturally specific nature of explanatory models becomes especially apparent when a translation between cultures is attempted. Consider the case of a Samoan family, recent immigrants to Hawaii, who had difficulty making sense of western physicians' diagnosis of diabetes mellitus in their daughter (Krantzler 1987). It was explained that the patient had a problem with "sugar." The parents concluded from this that inadequate sugar was the cause of the difficulty, and they responded

by ignoring the recommendation for insulin injections and supplementing their daughter's diet with sweets. Western physicians interpreted this as deliberate disregard for medical care.

The data on the impact of notions of illness etiology upon help-seeking suggest a certain consistency between the type of cause to which an illness is ascribed and the type of healer consulted. Other research in developing societies, in contrast, points to an apparent inconsistency. For example, a study of the health behavior of traditionally oriented and more modern-oriented women in a Mexican community (McClain 1977) showed that while study subjects with both orientations tended to conceptualize disease etiology and process in terms of traditional cognitive models, traditionally oriented women participated partially, and modern-oriented women fully, in the biomedical system. The author concludes from these findings that behavioral change proceeds faster than cognitive change, with respect to biomedical care. She attributes this to the fact that biomedical practitioners typically do not discuss disease etiology and process with their clients, concluding that "Modern medical practices and materials are available as alternatives to traditional counterparts, but medical cognitive models remain effectively hidden from observation, and therefore, from acceptance" (p. 341). This interpretation has been corroborated by the results of more recent research (Cosminsky and Scrimshaw 1980).

IMPLICATIONS FOR RESEARCH AND POLICY

A number of significant gaps in our knowledge of illness behavior in the developing world remain to be filled by additional research. Among these are (1) help-seeking patterns that combine resources from the popular, folk, and professional sectors, (2) factors affecting compliance with treatment, (3) illness behavior in chronic illness, and (4) the ways in which particular types of illness behavior work to influence health status.

A few of the factors that have been shown to influence help-seeking in the popular, folk, and professional sectors have been outlined here. Much remains to be understood, however, of the relative significance of these and other factors in particular cultural settings, and of the dynamics of the processes involved. What does the help-seeking process look like "on the ground"? How do particular individuals or families weigh the various considerations involved at each step, and how does this differ across cultural settings? What regularities can be identified in the ways people combine resources from different health care sectors? These kinds of questions are best answered through ethnographic research.

Referral patterns in help-seeking is another area where additional

research is needed. Who makes referrals to whom? Are certain individuals or types of individuals especially influential in particular societies with respect to healer choice? What part do social networks play in the referral process?

Compliance with treatment is an extremely important area for further research. Why do people choose to ignore recommendations for treatment? How can instructions be presented in a way that maximizes the likelihood of their being followed? What is the role of local systems of ethics in facilitating or complicating compliance? There are only a few of the questions that merit additional attention from social science researchers.

As we have seen, the changing composition of morbidity in the direction of increases in chronic illness is one of the defining characteristics of the health transition. Yet very little is known of the nature of illness behavior in chronic disease in the Third World or of the social factors that affect it. Additional research in this area would do much to illuminate the burden of disability in developing societies. The role of traditional healers in caring for chronically ill individuals is of particular significance here.

Finally, we need to know more about the mechanisms and processes through which illness behavior works to influence health status. What are the relationships between help-seeking patterns and health outcomes for particular illnesses? How are these relationships influenced by other aspects of illness behavior, such as patients' explanatory models? Does compliance with recommended biomedical treatment actually affect outcome? Under what conditions and in what ways?

Turning to health policy, steps should be taken to close the gap between behavioral and cognitive change with respect to the use of biomedical services. As we have seen, research on help-seeking from traditional and biomedical healers suggests that people may avail themselves of medical services without fully understanding them. While this might appear to be a positive development, its undesirable effects—for example, in the form of noncompliance with treatment or inappropriate use of drugs—should also be recognized. People must have a cognitive framework in which to place their experiences with biomedicine if they are to make safe and effective use of professional care. To this end, physicians and other biomedical practitioners working in developing countries should be trained to function not only as clinicians but also as educators who can explain the reasons behind the procedures they use and the treatments they prescribe.

CONCLUSION

Our intention here has been to argue for the necessity of incorporating local-level, cultural variables into social science research on the health

transition. By reviewing empirical evidence of cross-cultural differences in illness behavior, we hope to demonstrate that attempts to explain the health transition in terms of its social determinants will prove inadequate unless cultural variation is taken into account. The power and sophistication of social science models of the health transition are likely to be greatly increased when variables representing microsocial processes are included.

We have chosen to present data on illness behavior as a means of making this case. But an illness behavior perspective has other advantages as well. First, the study of illness behavior by definition shifts the direction of our analytical gaze from mortality to morbidity. The fact that this same shift is one of the essential features of the health transition makes illness behavior an excellent conceptual tool for examining changes in health status.

Perhaps more important, however, is the fact that a focus on illness behavior brings a recognition of the importance of suffering, as one aspect of the experience of illness, to the attention of the social science researcher. Suffering merits serious investigation because it is part of what is at stake in human experience worldwide. To neglect suffering in developing countries in the interest of highlighting the burden of mortality is to adopt an inhumane approach to Third World problems—an approach that would be regarded as scandalous if applied in a western context (Farmer and Kleinman 1989). The recognition of human rights in the health care domain requires the legitimization of suffering—the endurance of pain, the daily struggle of coping with chronic disease—as a crucial moral category. The study of illness behavior enables us to acknowledge these other, deeply human, aspects of illness experience (Kleinman 1988).

However, the problem of suffering is a problem of meaning as well as experience—a teleological quest to find moral and existential explanations for one's illness, to answer the question, "Why me?" Anthropological research on health and illness reveals that, of the many and varied systems of healing to be found around the world, only biomedicine systematically excludes the teleological dimensions of suffering from its stipulated domain. And this is, perhaps, the way it should be. For to attempt to apply the tools of the biomedical trade to fundamental questions of meaning and existence is to risk dehumanizing these questions by reducing them to problems of science and technology. Moral and spiritual epistemologies cannot be replaced by scientific models, regardless of their undeniable value in addressing the biological aspects of disease.

Neither should we rely too heavily on social science in this regard. While ethical and psychosocial interpretations are essential components of any comprehensive program of research on health and disease, they

too fall short, and necessarily so, in responding to the teleological issues that arise out of the experience of suffering in illness.

This tension between science and teleology is, and will continue to be, central to the dynamics of the health transition as biomedicine continues its advance into the developing world. An anthropological perspective on the processes of social change involved in the transition focuses attention on the significance of local systems of moral and religious knowledge as sources of existential meaning that biomedicine, with all of its healing power, cannot provide.

NOTES

1. For a detailed discussion of this, see N. Christakis, N. Ware, and A. Kleinman, "Illness Behavior and the Health Transition in the Developing World," in *Health and Social Changes in International Perspective*, eds. L. C. Chen, A. M. Kleinman, J. Potter, and N. C. Ware. In Preparation.
2. This is not to suggest that fatalism does not figure in interpretations of illness in the Third World. Rather, where this is the case, fatalistic attributions should be understood in terms of the larger system of meanings in which they are embedded. Similarly, we do not wish to suggest that families cannot be more effective in protecting the health of children. We do claim, however, that entire communities can rarely be justifiably charged with fatalism or negligence when other factors are taken into account.
3. These results are, of course, not strictly comparable, since they were obtained through different studies carried out at different times. Nonetheless, the findings are of interest in that (1) they are based on attempts to assess roughly the same phenomenon, and (2) they offer data from a number of different research sites.
4. Van der Geest and Whyte (1989), for example, choose to explain it in terms of the tangibility and concreteness of pharmaceuticals, which lift the experience of illness out of the ambiguous tangle of social relationships while connoting the power and authority of biomedicine.
5. John Caldwell, personal communication.
6. We recognize that important distinctions among the many different types of healers found around the world are underemphasized in this report. These distinctions have been subsumed under a single heading in order to focus attention on the matter of primary interest for this discussion.
7. Beliefs about the relative effectiveness of traditional and biomedical treatment also play an important role in determining healer choice. For a discussion of the impact of perceived efficacy upon help-seeking in situations of medical pluralism, see Christakis, Ware and Kleinman, "Illness Behavior and the Health Transition in the Developing World," in *Health and Social Change in International Perspective*, eds. L. C. Chen, A. Kleinman, J. Potter, and N. C. Ware. Forthcoming from Oxford University Press, New York.
8. Again, a rigorous demonstration of cross-cultural variation in factors affecting compliance with treatment would require controlling for variables such as type of illness. In the absence of systematically comparable data from different

cultural settings, we may conservatively interpret the relevant findings as suggestive, if not definitive, evidence of cultural differences.

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