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ABSTRACT

Intended as a companion piece to volume 4 in the Method Series, Sociocultural Factors in Health Planning (CE 024 232), this fourth of six volumes in the International Health Planning Reference Series is a combined literature review and annotated bibliography dealing with social, cultural, and behavioral aspects of delivering, planning, and assessing health care in developing countries. The review identifies literature relevant to anthropological, sociological, and ethnomedical contributions to the study of health care systems. The first part offers background material for understanding cultural belief systems related to health in Central and South America, Africa, and Asia (definitions of health). In the second part the responses to illnes and beliefs regarding health that permeate any culture are described at the generic level. The third part reviews transcultural commentary on providing modern medicine to countries still using traditionl medical systems. Two case studies are included. The 193 references incluiei in the review are contained in the bibliography. The format for each entry is author, title, source or publisher, data of publication, and annotation. (YLB)

International Health
Planning Reference Series

4

Socio-cultural Factors in Health References

Selected Bibliographies and State-of-the-Art Review for Socio-cultural Factors in Health

Selected Bibliographies and State-of-the-Art Review for Socio-cultural Factors in Health

U.S. Department of Health, Education, and Welfare
Public Health Service
Office of the Assistant Secretary for Health
Office of International Health

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PREFACE TO THE SERIES

The International Health Planning Reference Series has been developed by the Office of International Health, Public Health Service on request of the Agency for International Development.

The series consists of six basic volumes which cover a variety of health issues considered vital for effective development planning. These volumes contain reports of state of the art surveys and bibliographies in selected subject areas. These are intended for the serious researcher and planning professional.

These six volumes are supplemented by ten additional works in the International Health Planning Methods Series, which is intended to assist health sector advisors, administrators and planners in health related activities. Each manual in this series attempts to be both a practical tool and a source book in a specialized area of concern.

The volumes in the International Health Planning Reference Series contain the efforts of experienced professionals who have identified limited but pertinent reference materials for planning in a particular field. Through this effort they hope to provide the AID field officer and his host country counterparts with useful references for systematic health planning in developing countries

PREFACE TO VOLUME FOUR

This combined literature review and annotated bibliography deals with the subject of sociocultural factors in health planning for developing countries. It is the fourth volume in the series of works known collectively as the International Health Planning Reference Series.

The series was produced by the Office of International Health as requested by the Agency for International Development to provide AID advisors and health officials in developing countries with critically needed references for incorporating health planning into national plans for economic development.

This volume is intended primarily as a companion piece to volume four, Methods Series: Sociocultural Factors in Health Planning. References included here have been selected to identify works that support and enlarge upon material contained in the basic manual.

It should be stressed that the bibliography compiled here makes no claim to be an exhaustive or comprehensive listing of available resources. It is a selective bibliography only. Materials were included only if they dealt primarily with the problem of sociocultural factors in health planning for developing countries or if they contained material that was directly pertinent to that limited area of interest.

Texts written in languages other than English were excluded from consideration here. References that were of solely historical interest were not included, nor were several otherwise excellent texts that related only in general terms to the health sector in developing countries. Most of the references here are to books or articles published during recent years.

Preparation of this volume was undertaken for the Office of International Health by Plog Research, Inc., of Reseda, California, functioning as a subcontractor to the E.H.White & Co., Management Consultants, of San Francisco, California. This volume was prepared under the supervision of Renee White Fraser, Ph.D.

In the study of health care systems, several disciplines must be considered. This literature review and bibliography focuses on contributions from the fields of anthropology and sociology.

Anthropological literature that focuses upon health and illness in either evolutionary or crosscultural perspectives has become known as the literature of medical anthropology. The literature in this rapidly growing new discipline is vast and widely scattered. Numerous excellent works exist in languages other than English.

Similarly, contributions to literature on health care from the field of sociology form a classification known as medical sociology, a discipline which emerged during the 1950s. Two basic approaches are apparent: the sociology of medicine and ethnomedicine.

The sociology of medicine is characterized by studies of medical institutions and the systems of which they are a part. Works dealing with sociology in medicine are more often concerned with individual and social factors related to disease and treatment.

Ethnomedicine, part of the medical anthropology field, is the study of how members of different cultures think about disease and health, and how they organize themselves toward medical treatment. The literature in this area usually includes analysis of the medical model and the adequacy of the system it supports.

The authors of this work have frequently expressed personal points of view with reference to specific reviews. While their viewpoints generally coincide with organizations or agencies with whom they are associated, the material in this text should not be construed to reflect the official policy of any agency or organization.

Throughout this literature review and annotated bibliography, as was the case with the manual on this subject, is woven a recognition that an appreciation of sociocultural differences is an important prerequisite for successful planning of health care systems in developing countries.

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ACKNOWLEDGMENTS

Each volume in the International Health Planning Methods Series has been the work of many people. In addition to the primary authors, each manual has involved government reviewers and reviewers from positions outside government, editors, revisors, and numerous technical and support personnel. Substantial contributions have been made by manual advisors, who provided the authors with the benefit of their knowledge and experience in the fields under study.

With reference to Volume 4 Socio-Cultural Factors in Health References, the original authors were Renee White Fraser and Hadassa Shani.

Special thanks are in order for contributions made by advisors John Hanlon and Susan Scrimshaw.

Gratitude is also acknowledged to reviewer George Coelho.

While the present work could not have been completed without the assistance of these individuals, responsibility for the content of this manual rests with the authors.

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A REVIEW OF THE LITERATURE FOR SOCIAL, CULTURAL, AND BEHAVIORAL ASPECTS OF HEALTH PLANNING

The literature concerning social and cultural facts of delivering, planning, and assessing health care in developing countries has been reviewed for this paper. An emphasis has been placed on literature examining the provision of modern medical technology to these countries. This material underscores the quotation from Paul (1955), that any improvement in the provision of medical care to these nations demands a wider acceptance of a much deeper cross-cultural outlook. This paper presents an introduction to that outlook and the wisdom derived from the attempts to provide modern medicine to developing countries.

The literature clearly supports the notion that the key to the success of a health care program that includes modern medical technology from the West is understanding the culture and adapting modern medicine to fit the needs of the people from their viewpoint. This paper is organized around that principle.

The first part of this presentation offers background material for understanding cultural belief systems related to health in Central and South America, Africa, and Asia. This is followed by a description at the generic level of responses to illness and beliefs regarding health that permeate any culture. One particular response is to use a health care system composed of healers. Fundamental principles that underpin the relationship of any shaman/physician are presented here as a framework of tool for understanding a particular culture's approach to illness.

The third section reviews transcultural commentary on more efficacious means of providing modern medicine to developing countries. These comments include analysis of the obstacles inherent in this transfer of technology and recommendations on coping with this strategy.

The last section provides two case studies in the adaptation of modern medicine to fit the needs of the people from their viewpoint. This includes a detailed description of two viewpoints, Middle Eastern medicine and humoral medicine; and, a description of how these are able to interact with modern medicine.

Definition of Sociocultural Factors

The "social" (or socio-) factors that affect health care refer to the interactions between an individual and a group or institution in the health context. Most of these interactions are based on a set of norms and expectations dictated by culture through socialization.

In fact, the interactions in which one engages for the purposes of health have been described as constituting a health culture. Edgeland (in Weidman and Edgeland, 1973) has described this conception of health behavior: "... For every sphere of human activity, there develops over a period of time a complex of institutionalized norms. This clustering of norms, with

related values, beliefs, knowledge, folkways, mores, and customs, represents the sociological idea embodied in the concept— social institution. This implies that one can view the culture pattern as a series of inter-related institutions . . . Around sickness and health, in every social system, there has emerged some pattern of normative regulation, with all its inherent beliefs, expectations and sanctions . . . As a social institution, the behavioral sphere of health— illness is inter-related with all other vital areas of human activity (such as economic, political, educational, family and marriage, and religion)."

The cultural factors that affect health care blend very effectively into the social and psychological components of experience. Culture permeates a society and is only manifest in the social behaviors of people and their psychological experiences. One well accepted definition of culture (Tylor, 1871) presents the vehicles of culture and the means it uses to form the individual. According to Tylor (1871), culture is: "That complex whole which includes knowledge, belief, art, morals, law, customs and any other capabilities and habits acquired by man as a member of society."

The "complex whole" that is formed by culture and, at the same time, is culture is described by Honigmann (1963) as: "Patterns of learned behaviors and values which are shared among members of a designated group and are usually transmitted to others of their group through time."

Another explanation of culture by Amoss (1970) is more abstract, and it follows from cognitive map theory in psychology. This provides a conception of culture that more accurately portrays how culture is constantly operating in one's daily life:

"Each normal person, by the time he has become an adult, has in his mind an understanding and view of the universe in which he lives. This world view may be likened to a map; it is an abstraction. It only delimits certain features of the landscape. From an analogy of the various kinds of maps in use in everyday life, it would obviously be foolish to attempt to gain some idea of the altitude of the surrounding mountains from a road map. Likewise, if a navigational chart is chosen, very little knowledge of the highway system will result.

"This analogy is useful because the map we carry around in our minds abstracts certain important features from our surroundings and presents them. It is an important fact that we cannot see, or more properly perceive, everything in our universe. We only perceive certain things; our 'map' directs us to them. Our map, in a sense, spells out directions for doing things we want to do. The map stands as a screen between us and reality, and provides a set of directions on what to do under certain circumstances."

The part of this map that corresponds to perceptions of and activities related to one's body and one's mind is "health."

DEFINITIONS OF HEALTH

The concept of health is based on society's defined norm of well-being. A society is a complex of meaningfully articulated elements with a high degree of regularity in its functioning and predictability in its internal operations. The key point is that individual members perform a series of social roles. The capacity of an individual to perform the social roles represents health (Field, 1973). The factors that shape those roles and create the behavior associated with health and illness are derived from culture.

The concept of disease refers to some deviation from normal functioning which has undesirable consequences because it produces personal discomfort or

adversely affects an individual's future health status. Each of these considerations requires an evaluation or judgment; what is normal functioning; what are undesirable consequences; what is discomfort; what is an adverse affect on one's future health status. Cultural patterns and typical ways of life give substance to the manner in which illness is perceived, expressed, and reacted to.

Since a society's conception of health is integrally related to its culture, simple definitions of health throughout the world do not exist. The state of well-being and what constitutes a deviation from that labeled as an illness varies. The complexes of symptoms recognized as diseases with biological or theoretical psychological causes within western medicine persist in varying degrees throughout the world. However, they do not exist as those same distinct units conceptualized by modern medicine (Fabrega, 1975). What follows are brief descriptions of conceptions of health and their related cultural meanings in Central and South America, Africa, and Asia.

Central and South America

Individuals of Spanish heritage living in Central and South America hold sociocultural values that inculcate traditional religious dogma (Kenny, 1963). The individual is conceived of as "an integral being - body and soul" with specific social roles, "honorable manhood" for the male, and "immaculate motherhood" for the female. Health is based on the extent to which the individual fulfills his ideal social role. Therefore, illness represents a moral crisis invoked by the supernatural, and cure is thought to be affected, directly or indirectly, by supernatural forces (Foster, 1953; Lunch, 1969).

Within these cultures, the germ theory of disease holds little meaning (Lynch, 1969). Instead, the indigenous systems of folk medicine are based on humoral medicine. The body is in a state of equilibrium or health when the correct proportion of hot and cold exists. One's life is affected by the ever-present qualities of hot and cold (Logan, 1973). A detailed description of this belief system and its interaction with western medicine will appear later in this paper.

In the Mestizo groups of coastal Peru and Chile health is not dominated by a belief in supernatural causation. The Mestizo etiological conceptions seek no underlying support from religious or biological theories (Simmons, 1955). Instead, there are five major etiological categories that embrace all of the serious and most minor illnesses: illness caused by severe emotional upset; contamination by unclean persons; obstruction of the gastrointestinal tract; undue exposure to heat or cold; and exposure to bad air.

It is generally believed among the Mestizos that severe emotional upset may directly cause organic disorders, most of which are potentially fatal. Susto, fright, results from encountering an apparition, which always involves soul loss, or from a sudden and unexpected experience such as being startled or attacked by an animal, falling, particularly into water, a loud noise or clap on the back, and others which may not involve soul loss. Symptoms of fright including wasting away, fever, diarrhea, sleeplessness, loss of will, malaise, and general "nervousness" are often the symptomatology associated with diabetes. Embarrassment can result in "chucaque" whose symptoms are severe aches in the head, stomach, and abdomen, vomiting, diarrhea, fever and chills. A fit of anger is responsible for another set of symptoms; jealousy another, etc. (Simmons, 1955)

Contamination by virtually unclean persons is a category of illness with a magical etiology. The most important and pervasive cause in this category is el ojo, evil eye. Menstruating women are "virtually unclean" and not allowed contact with young children (Foster, 1953).

Obstruction of the gastrointestinal tract provides the etiology for all gastrointestinal illnesses, chicken pox, measles, and smallpox. Undue exposure to excessive cold or heat from the environment is the cause ascribed to a variety of illnesses including tuberculosis, pneumonia, influenza, bronchitis, whooping cough, cough, and the common cold (Simmons, 1955). All muscular and neurologic ailments (rheumatism, sciatia, arthritis) are ascribed to cold along with conjunctivitis and malaria (Simmons 1955).

"Bad air" is usually described as a current of air that enters any part of the body. Any sudden change in environmental temperature will make a person vulnerable to "aire," as the illness is labeled. The source may be the atmosphere or it may come from the graves of ancient ancestors. The symptoms associated with this condition are of assorted aches or pains (Simmons, 1955).

It is important to note that these notions are not consistent throughout the Mestizo people. There are variations in treatment and causation throughout subcultures (Gutierrez, 1975; Grollig, 1976).

Africa

In Africa, numerous systems of medicine exist. The bambara of Mali have a cosmological belief system that influences their perception of health. There is a constant equilibrium in the world between the four elements, water, earth, air, and fire. A disequilibrium of these elements or the elimination of one results in ill health. However, the causes of such disequilibrium are complex and multiple. Within the traditional context, diseases are classified into four categories corresponding to those elements (Zahan, 1957). Beliefs in this causation schema have been modified considerably under the influence of Islam. (Imperato, 1975) In contrast to modern medicine, diseases are not classified on the basis of syndromes caused by infectious agents, but rather by symptoms.

The basic cause in a disease is associated with the physical sensation caused by the element in question. The nosology is based on the association that exists between the elements and portions of the anatomy. The basic nosology of the Bambara is presented below in Table 1.

In most other African countries, the concept of disease first takes into account the role of the spirits of dead ancestors (Ndetig, 1976). Because of organic and psychological relations that exist between the living and the dead, the spirits of dead ancestors seem to take great interest in the affairs of the living. They regulate the general conduct of individuals in African society. Those who deviate from the normal activities in the culture, such as refusing to offer sacrifice to ancestors, disobeying cultural ethics, doing injustice to others, refusing to cooperate with others for the general good or ignoring one's responsibilities to himself and others must pay the price individually. The spirits do not discriminate in their attacks. Their victims include both adults and children. Their activities, however, are concentrated on the adults. Children are hardly ever possessed as adults are. The attack on the children seems to be a consequence of negligence on the part of adults in maintaining peaceful coexistence with ancestral codes. Animals and plants also follow suit because of this general ignorance (Ndetig, 1976).

The native doctors in Africa show unusual sensitivity to psychological needs. The emphasis in understanding illness is not how did it occur, but why (Imperato, 1974).

The native doctor is characterized by his understanding that all human diseases have a psychosomatic aspect. By psychosomatic, it is meant that health problems of whatever magnitude are likely to affect "normal functions" of an individual at the psychological and physiological levels. Because of

Table 1

Bambara Nosology of Some Diseases*

Element	Disease of Symptom	Bambara Name	Translation
Earth	Leprosy	bagi	drunkenness
	Anasarca	banu m'ba	large swelling
	Low back pain	koro dimi	back pain
	Constipation	kono dya	dry stomach
	Abdominal cramps	knoo dimi	stomach pain
	Abscess	soumoni	heart of gossiping
	Elephantiases of lower extremities	youmpogolo	spongeous
	Poliomyelitis	n'gara	to hinder
	Fractures	kolokari	broken bone
	Syphilis	da	create
	Yaws	m'soron	great syphilis
	Dental caries	soumon	gossip
Water	Jaundice	say	yellow
	Conjunctivitis	nye dimi	eye pain
	Thyroid goiter	folo	depth
	Trypanosomiasis	sunoko bana	sleeping disease
	Intestinal parasites	konona toumou	stomach worms
	Taenia	n'toro	taenia
	Pinworm	toumoni	little worm
	Secondary syphilis	blen boro	mouth syphilis
	Dracunculiasis	segele	drancunculiasis
Air	Smallpox	zo	smallpox
	Measles	neone	little millet
	Meningitis	finyabana	wind illness
	Headache	kungolo dimi	head pain
	Neurologic disease		
	Anxiety	hakili wili	nervousness
	Madness	ya	insanity
	Epilepsy	yere yere	convulsions
	Ear ache	klo dimi	ear ache
	Hiccups	yegerou	hiccups
	Ringworm	bada	tint
	Prickly heat	blani	small tint
	Acne	gorou	papule
	Arthritis	kolochi	bone pain
	Malaise	dyen dye wolofe	bent all over
	Impotence	kulusi dya siri	trouser attachment
	Deaf-mutness	boboya	heap
	Coryza	moura	coryza
Fire	Dysentery	tokotakoni	noise
	Laryngitis	ka sisi	burned neck
	Skin ulcers	cyoli	blood
	Gonorrhea	damadyala	dry mouth
	Schistosomiasis	nenkenieblenke	red urine

* This list presents a few examples only. (Imperato, 1975)

this realization, he makes sure that the diseased body gets its share of herbs, and psychological imbalances are restored. The psychotherapies take the forms of divination, confession, restoration of faith in the dead ancestors, offerings and "bibliotherapy." The native doctor prescribes dances in accordance with traditional culture. The dances are meant to entertain the spirits so that they keep away all the afflictions which cause human suffering. Voodoo and Zambi found in many African cultures, are in this category of dances. In addition, the dances form an excellent base for group therapy. It provides a free climate for catharsis.

In sum, a witch doctor treats effectively the three broad categories of diseases recognized in modern or scientific medicine:

Specific Diseases: The diseases in this class were fairly well known to the witch doctor. He knew specific herbs that he could administer and get the expected result. In modern medicine, diseases in this category are not many.

Symptomatic Diseases: The diseases in this group involved both herbal treatment and a psychological result. In other words the witch doctor gave an herb which reduced the symptom of disease in the patient without necessarily changing his pathological state.

Psychological Diseases: The witch doctor gave psychological therapies in addition to bibliotherapy. In this way he was able to improve the feeling of the patient without necessarily changing his pathological condition. A good doctor in the modern sense has to be more or less like the traditional native doctor. He is not a specialist who treats only specific diseases but also one who treats nonspecific diseases, that is, symptomatic and psychological ones which make up as much as 90 percent of all known diseases. (Ndetig, 1976).

Kiev (1964) presents an interesting, useful analysis of patterns of psychiatric care in Africa. Gillies (1976) offers a guide to the classification systems used in a variety of African societies. The particular reference is to causality. The emphasis is on demonstrating that most accounts have been too general and to show that witchcraft and sorcery are not the only means of treatment.

Other authors who discuss the contemporary functions of traditional conceptions of health in Africa and modern medicine are Vas Etten (1972); Messing (1970); Buck, Anderson, Sasaki, and Kawata (1970); London (1976); Stablein (1976); Kiteme (1976); Benyoussef and Wessen (1974); Imperato (1974, 1976); Grottanelli (1976).

Asia

There are three regional traditions of Asian medicine: Chinese, Ayurvedic, and Arabic-Persian or Unani (Leslie, 1975). Discussions of the history of these traditions and their similarities are numerous (Gallin, 1975; Burang, 1974; Bhardinaj, 1975; Beals, 1976; Basham, 1976; Jellife, 1957; Gould, 1964; Wolff, 1975; Foong-San, 1972; Ahan, 1975; Martin, 1975; Porkert, 1974; Kleinman, et al., 1975).

The systems of medicine in Asia all rely upon humoral theories. The Ayurveda doctrine incorporates five "bhutas" or basic elements; the "tridosa," three humors; and seven "dhatus," or components of the body. The five elements are ether, wind, water, earth, and fire. Buddhist thought adds consciousness (Obeyesekere, 1976). Physical health is maintained when the humors are in harmony. When they are upset, they become "troubles" of the organism. These systems of belief and the treatments within each are too complex for presentation in this paper. A detailed description of Middle Eastern theories of medicine will be presented later in this paper.

The following account of Indian village life in Nyderbad State demonstrates how illness is a part of the ritual structure of Hindu life:

"Most of the common diseases are interpreted as a 'fault in the physical system,' and are treated with herbal medicines or modern drugs obtained from the dispensary. Common colds, headaches, stomach ache, scabies, gonorrhoea and syphilis are regarded as natural diseases, and an effort is made to cure them with medicines. But persistent headaches, intermittent fevers, continued stomach disorders, rickets and other wasting diseases among children, menstrual troubles, repeated abortions, etc. are attributed to supernatural forces. In all such cases medicinal cures as well as propitiation of the 'unseen powers' are attempted simultaneously. Similarly such calamities as the failure of crops, total blindness, repeated failures in undertakings, deaths of children in quick succession and too many deaths in the family within a short time, are taken to indicate 'misfortune' and 'the handiwork' of malevolent supernatural forces." Smallpox, cholera and plague are always attributed to the wrath of various goddesses. For these diseases worship is regarded as the only remedy; and no medicines are administered to the patient." (Dube, 1955)

Opler (1963) who worked in North India reports on the general approach of indigenous medicine which in many cases is a hybrid of the three regional traditions of Asian medicine.

"Indian medicine considers disease as a state of disharmony in the body as a whole and a result not only of the external factors nor merely of the external causes. Hence, according to it, treatment should aim at not only the finding of appropriate internal remedies, but the employment of all available means to restore the normal balance or equilibrium. The comprehensiveness of the Indian medicine is further evident from the attention it gives to diet—both in health and in disease. It takes into account not only the prevailing season and climate but also the temperament and constitution of the individual." (Opler, 1963)

Kleinman, Kunstadter, Alexander, and Gale (1976) present an excellent series of papers comparing health care in Asian societies. Obeyesekere (1976) presents a translation of various Indian and Southeast Asian illness complexes and their western counterparts. Leslie (1976) presents a series of articles on the structure, history, and modern impact of these three traditions in Asia.

Kiev (1964) offers a useful treatment of folk treatment of mental illness in this area. Kapur (1974) offers a more modern examination of the patterns of mental health care in India and the current treatment by traditional and modern healers.

RESPONSES TO ILLNESS

In reviewing these brief descriptions of health it is evident that a society develops a means of maintaining health, a health care system, that reflects its basic conceptions of the meaning of life and its purpose (Lynch, 1969). The ways in which illnesses are conceptualized and the techniques developed to cope with them can be distinguished as four analytically distinct responses that man has evolved. Field (1973) presents these as follows:

"(1) The religious response to illness and death may be described as one that encourages their (passive) acceptance as the result of some higher force(s) or power over which man has no control, and whose designs are often mysterious or capricious. The religious response thus attempts to provide 'symbolic meaning.' For example, in the case of premature death that otherwise makes 'no sense.' the stock phrase is, 'The Lord giveth and the Lord taketh away, blessed be the name of the Lord.'

"(2) The magical response is an attempt to actively deal with illness seen (often in anthropomorphic terms) as the result of the actions of gods, divinities, witches, or other occult forces that must be palliated, neutralized, or in some fashion affected so that they, in turn, will affect the course of illness. It is an attempt to secure favorable outcomes, and is epitomized, in the modern world, by the familiar phrase: 'If you want to help the patient recover, pray for him as you have never prayed before.' This response thus provides 'ritualistic means' to deal with illness. The administration of certain drugs, whose effect is doubtful but hopefully harmless, may also be likened to a kind of magic associated with the need to 'do something.'

"(3) The pastoral response may be described as the provision of psychological help and support, of 'tender loving care' to the anxious and often emotionally regressed patient, particularly in the light of the association of illness and injury with possible permanent disability, dependency, suffering, and death. The psycho-emotional support and reassurance must include a strong fiduciary element, and reassurance to the patient that the health personnel 'care' for him in the dual etymological sense of 'love' and 'treatment,' and do not mean to exploit his defenselessness. In an evolutionary sense, its prototype is probably the mother-child relationship. This response thus provides 'affective meaning.'

"(4) The technical medical response is the provision of services aimed at dealing with illness and trauma in verifiable scientific-objective terms, both in the conceptualization of etiology and the application of remedial measures. It is usually conceived as an active intervention, as doing something to and for the patient, epitomized by the stock phrase 'the physicians are doing all they can to save the patient's life (or limb or health).' This response provides 'instrumental means.'" (Field, 1975)

Societies respond to illnesses through a combination of these four ways. Field (1973) has illustrated fairly typical American responses that reflect these characteristics. The depictions of health and illness in Asia, Africa and Central and South America display the fact that certain cultures emphasize one aspect as an explanation for disease and health. These methods of coping with illness can be considered to vary on activity and moderness dimensions. Field (1975) has presented this chart as a basis for describing a culture's reaction to illness:

	Non-Modern	Modern
Active	Magical	Medical
Passive	Religious	Pastoral

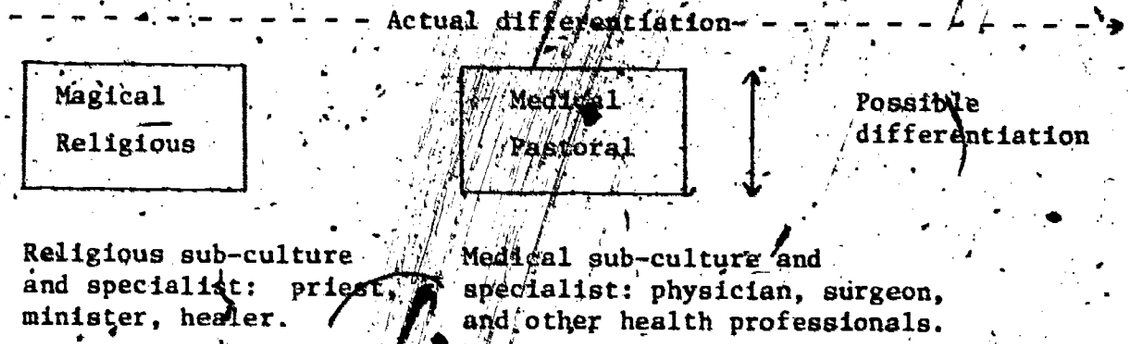
A culture's basic orientation predicts its position in this schema. A culture oriented toward the resigned acceptance of the world would emphasize a more passive religious and pastoral response to illness. While a culture oriented toward mastering nature would be more inclined to do something about illness in magical and medical ways. But even in the highly scientific medical systems of western countries, one finds important elements of magic (for reference, see Kiev, 1964). It is not unusual in western countries for a treatment to be prescribed because it answers the need to do something, even when the physician is fairly certain it will not help the patient. This is in a sense the employment of magic. Indeed, the workings of placebos in the West are "magical" in most accounts (Fabrega, 1974). At the same time primitive medicine contains many empirical elements (Simmons, 1955; Woods and Graves, 1976).

The Healer-Patient Relationship

This cross-cultural examination of reactions to ill health suggests the

complex basis for the conception of being "not healthy." Bodily abnormality, sensations, perceptions, ritual practice, and cognitive interpretation are fused in any conception of disease (Turner, 1963; Fabrega, 1974).

It is evident that in the process of social development in any society, a medical subculture and specialized occupational roles centered around illness emerge (Field, 1973). These specialized roles are undifferentiated with respect to the four responses outlined above in most developing countries. The specialist is simultaneously magician, priest, pastor, and doctor. The appearance of medicine as a distinct body of knowledge and practices combined with biomedical technology has led to a formal separation of the religious and medical roles, with distinct responsibilities. Fields' (1973) depiction is as follows:



In the developing countries, these roles are all played by the indiginous healer. For centuries, human societies have had persons perceived as more skillful than their fellows in the alleviation of discomfort. While indiginous practitioners are usually not full-time specialists in their craft of healing, they possess knowledge of healing aspects of the environment (herbs, physical locations, etc.) some rudimentary orthopedic and surgical skills, and some effective psychosocial techniques (Ackerknecht, 1942). The importance of the healing role is critical to a culture. The person with healing powers is a key and powerful resource in the stability of the group and its organized response to threats of all kinds, whether that be sickness, starvation, or famine through crop failure, disappearance of animals, or disruptions of bad weather. Guidance and counsel in the making of critical group decisions for either family or community is often part of the healer's role. The indiginous healer's role has a wide-ranging and comprehensive orientation responding at the next higher level of tehcnical skill after lay remedies have been attempted (King, 1976).

This role of the indiginous health practitioner is filled in the United States by the family doctor. Indeed Hughes (1976), and other anthropologists argue that the recent development of family medicine as a "new" medical specialty in the United States reflects a cyclic historical process returning the indigenous healer's role to the mainstream of American life.

Looking at the features defining the healer role from a historical and cross-cultural perspective demonstrates that a complimentary relationship exists between psychosocial needs of people with illnesses and the formal roles that eventually evolve in any culture to respond to those needs. If this is the case, there are critical behavioral and human relations factors that should be taken into account in the conscious planning of health care delivery systems throughout the world.

The major structural characteristics of the role of family physician correspond to generic dimensions of health care deliveries found in all human societies (Hughes, 1976: Hamodt, 1976). George Engel (1973) has written of the "enduring attributes of medicine" relevant for incorporation into the medical curriculum. These enduring attributes of medicine reflect the archetypical nature of the healer. Lynch (1968), Leslie (1976), Loudon (1976), Grollig and Haley (1973), and others support the similarity of role characteristics cultures attribute to the relationship between the healer and the patient. An understanding of this "skeleton" on which a culture's beliefs are hung provides a useful framework for gaining a culture's view of health. Comprehension of a culture's perspective of this social framework is critical for health care planning.

Engel (1973) summarizes these enduring attributes of the healer-patient relationships as follows:

"THE COMPLEMENTARITY OF A NEED FOR HELP AND A DESIRE TO PROVIDE SERVICE IS THE BASIS FOR MEDICINE AS A PROFESSION.

" . . . Implicit in this complementarity is that the patient ascribes powers to the physician and the physician ascribes powers to himself that are not necessarily attributes of either his theory or his practice. Indeed one might almost say that the survival of medicine as a profession over the ages has been more dependent on this complementarity than it has been on the soundness of its scientific theories or practices . . .

"THE PROCESSES INVOLVED IN THE TRANSITION FROM HEALTH TO ILLNESS TO PATIENTHOOD REMAIN CONSISTENT.

"The essential processes whereby an individual makes the transition from good to ill health surely are no different now than when man first fell ill, millennia ago. What has changed from era to era are concepts of disease and the social systems developed to provide relief . . . Clearly many psychological, social, and cultural factors are implicated in this transition from health to illness to patienthood. Indeed, they may be the critical determinants of how and whether patients enter a health care system and comply with the requirements of medical care . . .

"CLINICAL OBSERVATION IS THE BASIC METHOD OF DATA COLLECTION.

"Regardless of what systems of medicine or concepts of disease have prevailed over the ages, the competence of the physician has been measured by his ability to make the observations required for the application of his art or science. Modern science has changed our concepts and modern technology has vastly extended the range of our sense organs, but this basic principle endures. . .

"CLINICAL REASONING, JUDGMENT, AND DECISION-MAKING ARE THE ANALYTIC PROCEDURES OF THE PHYSICIAN.

" . . . Clinical reasoning encompasses the processes whereby the physician translates the data from the patient into frames of reference of the sciences relevant to health and disease. Clinical judgment and decision-making define the processes whereby such basic knowledge and clinical experience are used to predict outcome and to designate a course of action for the patient. When viewed through history, clearly these procedures are circumscribed by the prevailing theoretical systems and can be no better than the quality of the data being processed. In this context the doctrine of reductionism is no exception . . .

"THE CONTRACT BETWEEN PATIENT AND PHYSICIAN IS AN INTERPERSONAL BOND."

". . . Contractual arrangements (are) made, explicitly and implicitly, between physician and patient. To assure care the doctor must make a commitment to the patient, a personal, moral and ethical commitment in which one person pledges himself to attend to the needs of another, often for an indefinite period. Peabody epitomized this when he said, 'Treatment of a disease may be entirely impersonal: the care of a patient must be completely personal'. . ."

A TRANSCULTURAL EXAMINATION OF THE TRANSFER OF MODERN MEDICAL TECHNOLOGY TO DEVELOPING COUNTRIES

Many individuals who study health care in developing nations and the delivery of modern medicine to these cultures have made cross-cultural observations of the effectiveness of these transfers of technology. This section presents a summary of these comments. The comments include obstacles to be found in intervention, errors that have been made, and recommendations of certain approaches.

Cross-cultural Gaps

Paul (1963) provides an intercultural perspective on the effect of cultural and social differences on the outcome of public health programs in developing countries. He cites four characteristics of indigenous cultures that create obstacles for the implementation of programs of prevention.

1. Relatively low salience of health as a value. (See Messing's (1973) application of the Discounting Health Model to those whose major concern is subsistence as an explanation for this.)
2. Difficulties in perceiving the connection between a given action and its beneficial effects, e.g., in tropical regions people are willing to accept antibiotics for treatment of yaws because the effect is rapid and visible, but they hesitate to use latrines designed to break the cycle of infection from feces to water to mouth.
3. Limited future-time orientation of people in most developing countries is difficult to work with especially for prevention.
4. The existence of local competing preventative measures that are sanctioned by the culture.

Paul (1963) has also identified four gaps that exist in the intervention of a modern medical technology into developing countries. One is the culture gap that complicates communication and leads to the selective acceptance of offered innovations. This selection problem occurs because of differences in cultural values (i.e., cleanliness is often not a value) and in culturally conditioned assumptions about the nature and cause of illness.

In any social system, there are likely to be gradations of classes and social statures. In many developing countries, the status gap between the educated elite and the bulk of the population is major. The differences between felt needs of these divergent groups have important implications for health planning. These relations create a status gap between the health team and the public and between the ruling elites and their people (Paul, 1963). Ruling elites lay claim to knowing the people of their country and the health needs that are most critical. The implications and errors that result from this claim have been pointed out by Freedman (1957) on the basis of his experience as a health consultant in Asia: "I am impressed by three kinds of error which spring from (this unwarranted claim). The first of these is the error of supposing that within a given political territory all local communities conform

to a standard pattern of social organization. The second error is to confuse the legislated pattern of rural life with the actual pattern. The third error is to entertain a view of rural life which I can only call romantic; in this view—and it is a common one—the inhabitants of rural communities are credited with powers of spontaneous cooperation and harmonious co-existence to the extent that they resemble no human community which has ever been studied."

A third type of gap is the urban adjustment gap (Paul, 1963). This refers to the influx of rural populations into the cities and the environmental and health consequences. At the United Nations Conference on the Human Environment (1972), it was reported that the population of the main cities in the developing countries quadrupled between 1920 and 1960. These growth crises have implications for public health facilities, housing, and psychological well-being. The variables impacting on individuals making this change are numerous and not well understood. (U.N. Conference on the Human Environment, 1972; Tyroler and Cassel, 1964.)

The fourth gap identified by Paul (1963) is the research gap. The amount of money supporting research on human aspects of community development and health improvement is cited as disappointingly small. Banta (1969) and Bryant (1969) report this same problem as a major obstacle in the effective implementation of health care systems in developing nations.

Assessment

In the assessment and evaluation of health care systems, cost-benefit ratios are most commonly used. The desirability and meaning of these analyses represent ongoing budgeting arguments between economists and public health specialists. (Helt, 1973; Teeling-Smith, 1973; Smith, 1975.) Commonly absenteeism due to illness is used to quantify the effectiveness of health care treatment. Messing (1973) reports the inadequacy of this measure in recent evaluations in Ethiopia. He also presents a more insightful model with which one can understand the cost-benefit evaluations regarding health made by rural poor in developing countries.

Messing (1973) reports the two questions asked in the Ethiopian evaluation project: Did head of household have any illness which prevented him from carrying out his usual occupation? How many work days have you missed due to health?

The responses are intelligible only if the cultural standards by which respondents identify sickness are known. In the Ethiopian assessment, Messing reports the large majority in each of the communities stated they had not been ill during the past month, despite the prevalence of many contagious diseases and unsafe water. But, in an ecology of poverty time pressures are rare and most labor requires little skill; children of all ages are available to receive delegation of more or less casual day-to-day activities. Not pampered by life, respondents who had been able to pursue their customary routines without having to recline all day, defined themselves as "not ill." The second question was asked as a further check of recall and accuracy, but Messing (1973) reports the results were the same. He concludes, "Neither can be used as a valid index of economic loss due to ill health, for the undeveloped economy does not require sustained punctual effort." In fact, causes other than ill health were much more common sources of absenteeism from work: religious holy days, severe illness, death, and mourning for a wide variety of kinfolk, customary visiting of kin at regular and frequent intervals, presenting oneself as a courtier to various officials.

Messing (1973) suggests that a discounting health model best explains the attitude toward health and development by the Ethiopians. He has used the model as an explanation for the ineffectiveness of "carefully trained health center personnel" in that country. His perception is based on six years of participant observation descriptive "community reports," and unsolicited comments by respondents during the evaluation research. Messing applies the "Discounting Health Model" to peasant sharecroppers and other poor people who make up the large majority of Ethiopia's hinterland. More than likely, this model is true of any people whose major concern is bare subsistence. Messing's (1973) explanation of the Discounting Health Model is:

"The basic premise of the economic concept of discounting is that a benefit in the future is not valued as much as the same benefit in the present. Discretionary resources of time, energy and money are not available to chronically poor majorities who barely subsist. They would therefore have no means of investing in their futures, for insurance or for preventive health care. The poorer they are, the higher the discount rate. In these cases, preventive health behavior does not bring sufficient payoff to be worthwhile, particularly if the costs incurred are immediate."

Ethnocentrism

A major hindrance in the transfer of modern medical technology to developing countries is the ethnocentric attitude of visiting health teams and experts (Scrimshaw, 1974; Glittenberg, 1974; Banta, 1969; Paul, 1955; Reed, 1966; Shiloh, 1968; Fabrega, 1975). This ethnocentrism has two aspects to it that are equally obstructive. First is the transfer of cultural expectations. Physicians, nurses, sanitarians, and health educators often transfer from their own cultural background their expectations of how people will behave or ought to behave in certain crises or conditions of illness. This ignorant transference is a feature of the culture gap delineated by Paul (1963). A second aspect of ethnocentrism is the belief that western medical technologies are "correct" and should readily be accepted by people in developing nations. (Banta, 1969; Hanlon, 1972; Mechanic, 1968; Shiloh, 1968)

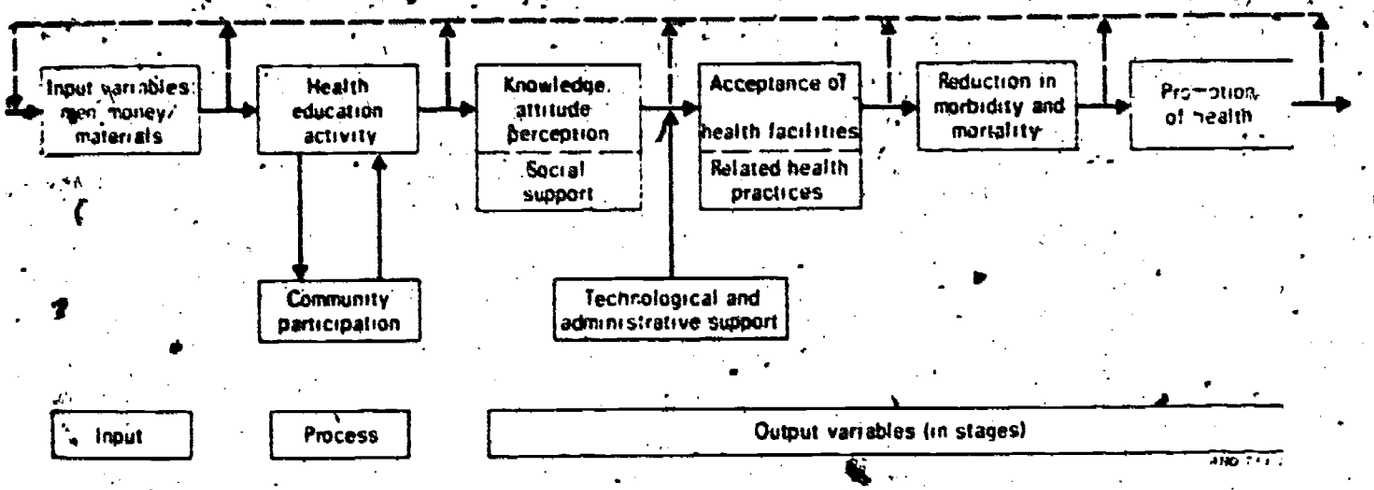
Education and Training

Another lesson that has been learned as modern medicine has been brought to developing countries is that involving the people as active participants and contributory decision makers is vital to developing, implementing, and assessing a health care system. It has been well documented that cultural change occurs more rapidly when the individuals experiencing that change feel a need for the particular change, realize some advantage in it, and participate in planning and affecting change (LeVine, 1973; Leininger, 1976; Lynch, 1969; Reed, 1966). The involvement of the people in such endeavors requires health education and training. The need for education and methods to provide it have received only a moderate amount of attention. The efforts in this area encompass education for the family, personal hygiene, and paramedical personnel. (Bryant, 1969; King, 1966; Leininger, 1976; WHO, Pisharoti, 1975).

Health education has been acknowledged recently as a crucial accompaniment of the interventions in planning and implementing environmental health programs (WHO, Pisharoti, 1975) as well as health care delivery systems (Leininger, 1976). Education is an important aspect of creating effective health programs. The first step in persuading individuals or communities to change any behavior is to create in them a desire for change or an interest in it (see LeVine's (1973) description of psychological processes). Similarly, the initial step in education should be to create opportunities through which

the curiosity of people is aroused. But, the educational approaches must fit into the learner's perception of the situation (Banta, 1969). The importance of studying and understanding the cultural belief systems, social behavior, and perceptions of the people is clear.

The ultimate objective of health education is the attainment of highest levels of health. But, educational programs will usually pass through a number of intermediate-level objectives before that is reached. A representaion of these levels is provided in a model for health education adapted from WHO, Pisharoti, 1975.

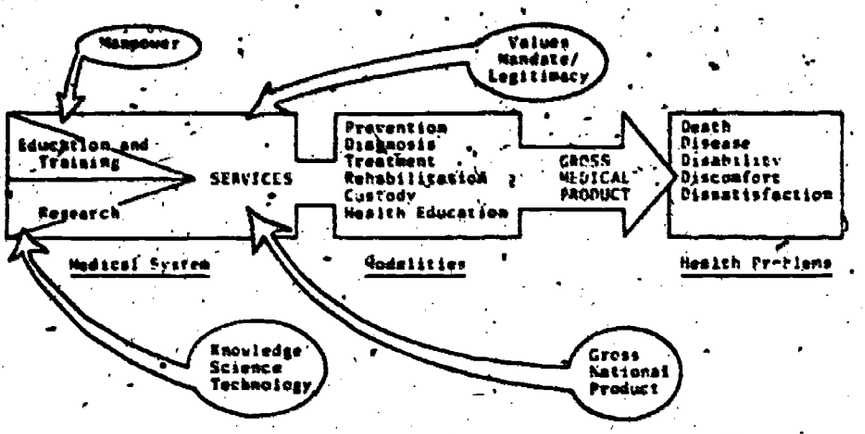


(Adapted from WHO, 1975).

Acculturation

Fundamental culture patterns tend to remain unchanged, but general acculturation is possible in developing countries (Lynch, 1969). The evidence for acculturation can be seen in the cross-cultural predominance of the co-existence of folk medicine and the modern medical professional (Leininger, 1976; Logan, 1973; Shiloh, 1968; Paul, 1963; Glitternber, 1974; Obeyesekere, 1976; Beals, 1976; Jaspan, 1976). How to systematically accomplish the efficient synchronization of these systems has not been determined. One necessary component of adapting modern medicine to an indigenous health system is to understand fully the western medical system and the assumptions upon which it is based (Glittenberg, 1974; Field, 1975, 1973; Read, 1966).

Field (1976) has offered a well-accepted model of the modern medical system. The medical system scheme with its structural (cultural) supports appears below.



(Field, 1976)

Once one understands the underlying assumptions inherent in the modern medical system, the critical areas involved in any transference of technology become clear. Further, areas of overlap and interaction between the indigenous and modern medical system are more perceptible. The specific integration of two medical systems at a micro level will be presented in the next section.

Models

Recent anthropological literature (Fabrega, 1974, 1975; Baltes, 1976; Engel, 1977) has posited new models of disease and illness as a means to effective transcultural health care. These proposed models abandon or supplement the biomedical model with behavioral considerations. The major thesis behind these approaches is that the biomedical model is incomplete and inaccurate. The traditional biomedical model has advantages in cases of physical illness, but clearly has disadvantages in other instances. When illness cannot be reduced to a biological unit of analysis with organismic antecedents (for example, psychosomatic and mental illnesses), the model flounders (Baltes, 1976). Furthermore, in the developing countries where cultural explanations for illness refuse to be reduced to biological units of analysis, the utility of the model in identifying and treating illness is severely limited (Fabrega, 1975).

THE INTERACTION OF TRADITIONAL MEDICAL SYSTEMS AND MODERN MEDICINE

Recently, a large literature detailing the interactions of western modern medicine and traditional medical systems at the microsociological level has emerged. (Pockert and Jones, 1976; Leslie, 1976; Dunn, 1976; Obeyesekere, 1976; Topley, 1976; Field, 1975; Kochar, et al, 1973; Gracia, 1973; Grottanelli, 1973; Woods and Graves, 1973; Haley, 1973; Quintanilla, 1973; Stablein, 1973). Most of this literature includes descriptions of interactions between these medical systems in developing countries throughout the world.

This literature and other ethnographic descriptions of various health systems demonstrate that traditional systems coexist with modern medicine. (Beals, 1976; Jaspan, 1976; Montgomery, 1976; Leslie, 1976; Grollig and Haley, 1973; Shiloh, 1968). Foster (1955) has noted that even though local disease theories change very slowly, the pragmatic and essentially empirical attitude of many persons enables them to rapidly alter or accept certain medical practices or behaviors. Simmons (1957), Gould (1957), Beals (1976), Montgomery (1976), and others demonstrate that western medicine will supplement local medicine efficiently.

The coexistence of these two medical systems is surprising to some (Shiloh, 1968). Evidence from the psychological literature underscores the adaptability of man and the flexibility that makes this coexistence possible. (Skinner, 1954). LeVine (1973) has identified a set of propositions extracted from intercultural experience that represent plausible assumptions about cultural variation and change in individuals. Those propositions are listed below:

1. "Some culturally distinctive patterns of thought and feeling are not readily accessible to verbal formulation or voluntary control but seem to influence the individual's decisions about regulating himself and adapting to his environment.

2. "These patterns are not easily reversed even when the individual is outside the cultural environment that normally reinforces them.

3. "The individual can adapt behaviorally to the demands of novel cultural environments without eliminating these patterns of thought and feeling, although their behavioral manifestations may be temporarily inhibited or situationally restricted.

4. "The relatively unconscious, involuntary and persistent qualities of these patterns and the difficulty of their being acquired by an exotic adult through conscious imitation indicate that they are normally acquired early in the life of the individual.

5. "The persistence of these patterns in novel cultural environments and the probability of their childhood acquisition suggest that they should be thought of as representing dispositions of the person (personality dispositions, as defined in the previous chapter) rather than simply of the environmental situations that foster them.

6. "Their conceptualization as reflecting personality dispositions is also supported by their apparent salience in the individual's structure of subjective thoughts and emotions about himself as a separate and continuous entity and by the apparent relevance of that structure to his decisions about self-regulation and adaptation. In other words, they play a part in the organization of his personality."

Certainly patterns of thought and behaviors related to health are part of an individual's disposition. These aspects are the result of the influence of culture. Propositions 3 and 5 are particularly relevant to any attempts at

changing these patterns. These propositions support and emphasize the intractable positions these patterns hold in the life of an individual.

The integration of western medical technology and indigenous medical systems reflect these propositions. That a traditional medical system can be supplemented by western medicine has been demonstrated by a variety of the authors listed above. This paper will present the means and method of that integration into two distinct medical systems of belief: Humoral medicine and Middle Eastern medicine. These descriptions of integration require background descriptions of the traditional systems of medicine in order for the reader to fully comprehend the obstacles in the way of simple substitution and to understand how the integration must occur.

History and Structure of Humoral Medicine

The Indian and Ladino people of Latin America classify modern medicines, foods, medicinal plants, and illnesses according to a conceptual scheme of opposition between the qualities of hot and cold. The belief system of which the humoral scheme is a part influences an individual's selection and assessment of medical treatment. It has been demonstrated that when prescribed treatment ignores the humoral concept or creates unacceptable contradictions between modern and native philosophies of health, such treatment is less likely to be effective or accepted than if native concepts were incorporated into the [redacted]ribed treatment. (Logan, 1973; Gonzales, 1964; Woods and Graves, [redacted]

The concept of humoral medicine has received considerable attention in the anthropological study of folk medicine. The history and diffusion of this medical approach has been dealt with by Foster (1953), Hart (1969), and Leslie (1976). Foster and Rowe have provided a methodological procedure for recording data as humoral classifications.

Descriptive reports of the use of the humoral theory of disease in the ethnomedical literature abound. In that literature on Mexico, these articles provide useful accounts: Ingham (1970), Foster (1967), Currier (1966), Lewis (1960), Madsen (1966), Mak (1959), Madsen (1955), Redfield and Park (1940). The anthropological work on Guatemala that is useful for these descriptions includes Glittenberg (1974), Logan (1973), Gonzales (1969) and (1964); Cosminsky (1972); Woods and Graves (1976); Douglas (1969). The relevant descriptions of humoral medicine in Costa Rica are found in Richardson and Bode (1971) and Orso (1970).

The ethnomedical literature on Puerto Rico comes from Tandy (1959), Mintz (1956), and Wolf (1956). South America has been studied by a variety of anthropologists who focused on the use of humoral medicine (Aamodt, 1976; Loneland, 1976, Grollig, 1976: Taylor, 1976; Purdam, Gordon, and Michelson, 1974; Reichel-Dolmatoff and Reichel-Dolmatoff, 1961; Simmons, 1955; Wellin, 1955). Spiro (1967) reports on the use of this belief system in medicine in Burma. Accounts of the use of humoral medicine include the use of this belief schema in India (Opler, 1963) and England (Tillyard, 1944).

The ethnomedical literature on humoral medicine is primarily descriptive. The direct implications of this belief system for understanding and treating patients who subscribe to it are rarely examined. Recently, Harwood (1971) and Logan (1973) have provided some practical suggestions for integrating modern medicine with this folk medicine. The realities of integrating these two medical belief systems will follow this brief description of the history and structure of humoral medicine.

The science of treating illness and maintaining a healthy state by prescribing foods or elements with the qualities of hot and cold is derived from a humoral system of beliefs. This approach to health and healing first appears

in the writings of Greek scholars (Leslie, 1976). Some authors posit that the similarities between the Hippocratic work and the yin-yang theories of ancient China suggest a center or origin other than that of the Mediterranean area (Lessa, 1968; Leslie, 1976). Humoral science diffused from Greece and Rome to the Arabic world and introduced into Iberia with the Moorish occupation (Foster, 1953). Expansion of the Spanish empire during the sixteenth century brought this doctrine to the Americas, and through acculturation, humoral medicine was incorporated into Indian and Mestizo world views of health.

According to the Hippocratic theory, "There were four primary and opposite fundamental qualities, the hot and the cold, the wet and the dry. These met in binary opposition to constitute the essences or existences which extend in varying proportions into the constitution of all matter." (Logan, 1973). The four humors -- blood, phlegm, black bile, yellow bile -- possessed these fundamental qualities. Each humor had its complexion: blood, hot and wet; yellow bile, hot and dry; phlegm, cold and wet; black bile, cold and dry. (Foster, 1953). The health or "complexion" of an individual could only be maintained as long as the body's natural equilibrium between hot and cold, wet and dry was not upset. (Logan, 1973).

The humoral qualities of hot and cold do not refer to actual temperature changes. Similarly, the terms wet and dry do not pertain to water content. These qualities refer to the innate character or essence of a given object or personal state of being. Natural objects, foods, and illnesses possess these symbolic qualities and can alter the health of an individual through contact, consumption, or contagion (Gonzales, 1966). For example, overconsumption of hot foods increases the body's normal content of heat and, if excessive, provokes ailments that are labeled as hot in nature. Treatment would call for equalizing the body's temperature balance and restoring neutrality by consuming a number of "cold" foods and medicines.

In the areas of Latin America and some parts of South America, the Hippocratic theory of humoral medicine was simplified as a result of cultural trait selection. The qualities of wet-dry became less significant while temperature grew in importance and came to dominate beliefs about health and illness in that part of the world. (Logan, 1973).

Contemporary Functions of Humoral and Modern Medicine in Latin America

The belief that one's life is affected by the ever-present qualities of hot and cold is widely held in Latin America. The commitment to the humoral philosophy functions as a directive of behavior, and the effects upon behavior are relative to the degree of commitment. This belief system influences the individual's diagnosis of illness, choice of diet, and choice of medical treatment. An example of how commitment to this belief system and behavior reflect each other is furnished in a report by Logan (1973). A third and newly emerging category of "neutral" is being employed in Guatemala by some of the acculturated residents. Neutral elements are neither hot nor cold and have no effect on the body's temperature balance. Included in this category are some illnesses, some modern medicines, and most dietary staples. Logan (1973) hypothesizes that the emergence of the neutral category reflects a reduction in anxiety concerning food and disease among acculturated persons of higher socioeconomic status.

The patterns of hot-cold classification of food, illness, and medicine are not uniform throughout the areas of the world. These patterns actually vary considerably among groups within Meso-American (Redfield, 1940; Foster, 1967). The cognitive system that underlies the various classification, however,

is universal. It is based on the assumption that elements exist naturally in a state of binary oppositions and the effect of one element equalizes the valence of another. What conceptual criteria segregate the elements into opposing qualities has recently been investigated (Harwood, 1971).

When physicians prescribe medicine or dietary regimens that conflict with a patient's belief in the humoral concept, the successful treatment of the patient is of low probability (Woods and Graven, 1976; Gonzales, 1968). The probability of a physician changing a patient's belief in humoral medicine in the course of often infrequent and impersonal treatment sessions is also very low. In fact, the general pattern in much of Latin American is that modern western medicine does not replace or significantly alter patterns of folk medicine. Instead, it serves as an additional system employed concurrently with traditional forms of humoral medicine (Gonzales, 1966; Simmons, 1955; Press, 1971).

To improve the efficiency of health care in developing countries, the literature suggests that medicines and dietary regimens known to be clinically effective be provided within therapeutic programs that are sympathetic to and compatible with patients' beliefs and cultural habits. In the case of humoral medicine, Harwood (1971) and Logan (1973) have systematically studied the humoral medicine belief system to find a means for adapting modern medicine techniques to increase their effectiveness and acceptance.

Logan (1973) found that Guatemalan and Puerto Rican patients would reject medication when there was a conflict between the temperature qualities of a patient's condition and the prescribed medicine. For example, vitamins were rejected in the treatment of illnesses producing high fevers. Fruit juices were rejected in treatment of the common cold. It became clear that patient behavior was predictable as long as the appropriate temperature qualities are known for both the illness and the prescribed medicine. Logan (1973) has identified the conceptual criteria that are used to determine the temperature qualities of various items, bodily states, and medicines.

Logan (1973) has identified and empirically verified the definitional criteria underlying the classification of foods and medicinal plants in humoral medicine.

In this same article, he reports the definitional criteria involved in classifying illness within this medicine system include etiology, therapeutic prescription, individual sensation, and affected organs and body substances. Logan (1973) has identified the cognitive notions that are used in humoral medicine in classifying illness. These are as follows:

"Etiology: When etiology is known, the ailment is equal in temperature to that of the cause. One 'overcome' by evil eye, for example, will manifest an illness also hot in nature.

"Therapeutic prescription: Instructing a patient to omit hot foods from his diet -- say peppers and liquor -- inadvertently isolates a temperature quality for the illness equal to that of the restricted foods. In this case, the illness would be hot because the forbidden foods are hot.

"Individual sensation: In general, when a patient has a sensation of being 'chilled' or 'heated' due to abnormal metabolic temperature, his condition is categorized equally to that of his sensation. If chilled, the condition is cold; if feverish, the condition is hot.

"Affected organs and body substances: Lastly, illnesses affecting specific organs or body substances are of the same temperature quality of the organ or substance. Hepatitis, for example, is hot because it involves a pathogenic condition of the liver, which also is thought to be hot.

Logan (1973) also empirically investigated how temperature classification of modern medicines occurs. Regardless of color, physical properties, and means of administration, a medicine is classified opposite to the culturally known temperature quality of the symptoms or illness for which it is to be used as treatment.

To effectively provide health care to those who believe in humoral medicine requires an understanding and acknowledgement of the temperature categorization scheme used. Logan (1973) has presented a technique and scheme of hot, cold and neutral foods, medicinal plants, and commonly prescribed medicines. By knowing the temperature qualities of a patient's illness and the prescribed medicine, a physician can forecast patient behavior and develop a therapeutic program suitable to the patient's medical and ideological needs. This can be done by (1) selecting medicines and foods of the opposite temperature quality of that of the patient's condition, but if that cannot be done without jeopardizing the clinical effectiveness of treatment, then by (2) "neutralizing" the essential medicines and foods by jointly prescribing "placebo" elements of an appropriate temperature category to restore necessary opposition between the patient's condition and essential medication (Logan, 1973).

The Middle East System of Medicine

The essential philosophy underlying the system of medicine in the Middle East is that illness and injuries are subjective affairs arising out of personal actions conducted, not conducted, or caused by someone or something possessed with a power. Illnesses and injuries do not just occur— they befall a certain victim at a given time and in a specific manner because of specific causal actions: (Shiloh, 1968).

The two concepts basic to preventive and curative medicine are belief in animism (spirits) and belief in animatism (impersonal powers, the evil eye) (Darity, 1965). Illnesses and injuries are caused or engendered by a spirit which enters the body and creates the difficulties or by a person or object with the power to negatively influence or affect the body. The spirit or power causes the illness; must be exorcised or weakened to remove the illness; and it is this spirit or power which must constantly be placated, frightened away, or misled. The spirit may be called "evil spirit," or the "jinn," or the "devil," or "Satan." In some cases it has a specific name such as "Lilith." The power to affect and influence the body and nature in some circumstances is popularly concentrated in individuals possessing the "evil eye," although there are specific objects that may be used to attract or repel evil. (Shiloh, 1968; Darity, 1965; Good, 1976). The strength of the belief in these powers still exists. Hamady explains:

"The belief in the evil eye is strong and widespread among Arab people. In their view, its bad influence spares nothing, for rarely can anyone escape the injury that it is able to inflict. It is considered a frequent cause of misfortunes, such as sickness, death, or bad luck. There are many popular sayings that mark its fatal effects: 'It empties the houses and fills the tombs.' 'It is to the evil eye that belongs two-thirds of the graveyards.'"

The distinction between injuries affecting the "external body" and illnesses affecting the "internal body" is important. The emphasis in treatment of injuries to the external parts of the body is based primarily on remedying an obvious external difficulty. Thus, an individual who falls from a tree or suffers a burn may have been caused to suffer this affliction because of an evil spirit or evil eye. The treatment of the afflicted limb or section of the body is prompt and based upon objective principles of bone-setting, blood-stopping, flesh-soothing, and bandaging.

The treatment of illnesses of the inner body requires the use of traditional methods and reflects the strength of the beliefs in animism and animatism. It is understandable that the mysterious concealed illnesses of the inner body convey fear of the unknown. The lack of knowledge of an objective treatment leads to an emphasis on subjective beliefs in evil spirits and evil power. In dealing with illnesses and the inner body, the primary emphasis is on prevention rather than treatment, It is recognized clearly and dispassionately that the techniques of curative medicine in illnesses of the inner body are not as successful as might be desired, whereas the results of preventive medicine are far more dramatic and fruitful (Shiloh, 1968).

In the case of illnesses of the inner body, there is a pronounced emphasis on preventive medicine with a developed complex of permissible and taboo actions governing one's lifestyle (Darity, 1965).

The evil spirits are ubiquitous in the environment according to the Middle Eastern belief system. Strong, healthy, mature individuals are the least susceptible to such attacks. The most susceptible are infants and children, the weak, the ill, the aged, and normally healthy persons in certain circumstances (e.g., women during menstruation, pregnancy, or while giving birth). Since the evil spirits are always lurking and ready to enter the body, susceptible persons should never be left alone. This is interpreted as a sign of abandonment to both patient and evil spirit.

The implications of these beliefs for culturally suitable health care are many. The continued presence of strong, healthy individuals near a patient is a strong deterrent to the evil spirit, but, unfortunately, these people cannot be relied upon to be constantly on duty. To supplement for their power, various inanimate objects that possess strong powers to repel evil spirits are used. Common objects of this nature are elaborated by Shiloh (1968):

" . . . The 'Hand of Fatimah' (beloved daughter of Muhammad) which may have inscribed on it holy words in Arabic or Hebrew and is generally worn around the neck (among Cochin Jews it may be found around the abdomen); the 'Shield of David' (a six pointed star and similar to the 'Hand of Fatimah' in function); blue beads, pieces of jewelry or bits of cloth which are worn around the neck or attached to the clothing (blue is particularly repugnant to the evil spirits and the evil eye, and it may frequently be seen, for example, as the contrast color around the doors and windows of a home or as the dangling memento above the front or back window of an automobile); a concoction of evil smelling herbs which will be placed in a bag and worn close to the body, or various religious phrases which are written on paper and sewed into the clothing or put into a bag and worn on the body.

"A religious prayer or talisman tacked over the door is particularly efficacious in repelling the evil spirits from entering a home. In the home where there is an infant, various measures are taken to protect the child from the evil spirits. Iron wards off the evil spirits and therefore a mother may keep an iron knife or pair of scissors under the pillow of her baby. The Bible also possesses the power to repel the evil spirits and thus some Jewish mothers place a copy of this book beneath the pillow. Another practice, less commonly seen, is to preserve the foreskin cut off during the brith millah (the ceremony of circumcision conducted on every Jewish male child when he is eight days old), dry the piece of skin, powder it, sew it into a piece of cloth and keep it under the pillow or among the blankets of the child's bed. The personal foreskin of a child is considered efficacious in repelling evil.

The evil spirits also fear the name of Allah. Consequently, his name is uttered perpetually while engaged in the everyday routine of life. Healthy individuals in susceptible circumstances are careful to repeat his name and particular prayers as a preventive measure.

Pregnancy and conception are important states of being that are vulnerable to evil spirits. Through the actions or transgressions of a pregnant woman, the evil spirits may gain access to her body to affect abortion, difficult or fatal childbirth, or imprint lasting negative results on the child. During delivery, a woman must constantly repeat, "In the name of Allah," or else the evil spirits will exchange her child for one of their own. An exchanged child is a "changeling," and it is socially acceptable to let such a child die of neglect or malnutriation (Shiloh, 1968). The afterbirth contains a powerful force of protection for the newborn child and must be saved. It may be left attached to the child for some hours or overnight and then must be presented in or near the house as a source of strength for the child.

Women during menstruation are believed to be very dangerous. They are considered to be not only unclean and impure but, if not actually possessed by a spirit, are facile transmitters of the actions of evil spirits. Accordingly, they must be separated from healthy people. More importantly, they are kept away from the susceptible, the ill, and women in labor.

The prevention of illness to the inner body by the evil eye, as distinct from the prevention of illness to the inner body caused by evil spirits, is based on misleading, deceiving, and deluding it. In contrast to the evil spirits, the evil eye is attracted to the healthy, the beautiful, the happy, and children.

In the Middle East, the principal possessors of the evil eye are women. Shiloh (1968) reports no available satisfactory explanation for this. Roheim (1953) suggests that the evil eye represents an envious eye. Thus, the preventive measures are based on the principle of not attracting the attention of this envious or evil eye.

The youngest are particularly attractive to the evil eye since children are considered a blessing. Carrying out this theme of deception, children are kept ragged and unkempt in public; a child's name may be kept secret so as not to be utilized for evil purposes; and children are never praised in public or baosted about. Male children are highly prized in Arab society. Consequently, a male child may be dressed as a girl and referred to in the feminine until the age of five to prevent the evil eye from focusing on him. (Hamady, 1960)

This belief in deceiving the evil eye has great implications for social contacts and gaining accurate information from these people. Questions as to personal or family health as well as business or status should be replied to with shaking heads and gloomy predictions. Yet it is possible to accept praise or note good health, good fortune, or good looks, if one is careful to constantly invoke the name of Allah and/or deny the force of the evil eye. (Shiloh, 1968)

According to Shiloh (1968), particularly powerful in defense against the evil eye are amulets. Blue beads are the most common type, and they may be found on the person, in the house, on a dog, a horse, cart, or automobile.

If these preventive measures are ineffective and evil spirits do enter the body, or the evil eye finds the body interesting, and illness occurs, then the curative medicine practices are used. These practices are recognized as being less effective than the preventative measures. Therefore, although the curative practices ostensibly aid in rejecting evil spirits or eliminating the influence of the evil eye, an attitude of fatalism persists. At a deeper level, the purpose of these curative practices is to provide emotional comfort and security to the patient and his/her family.

The psychological purposes of the curative treatment can be seen in the techniques of the local practitioner when he is called to the patient. Shiloh (1968) outlines the approach below.

"(1) The local practitioner gives the family his undivided attention--he is there solely for their interests and he is patently desirous of listening to them as long as they wish to speak.

"(2) He then identifies and names the disease--to do this is to immediately define it, circumscribe it, tame it, weaken it. The diagnosis provides the patient with a sense of relief that the unknown pain has been mastered and it provides the practitioner with a medical treatment.

"(3) The practitioner then makes a positive prognosis--to pronounce a positive prognosis neutralizes or weakens the evil forces at work on the ill person and promotes and strengthens the assistance of strong or positive force working on his behalf; the sick individual and his family know that only direct positive benefits can flow from such a pronouncement.

"(4) The practitioner then initiates certain measures to evict the evil spirits or draw away the evil eye. These include smoking, drinking, chanting, praying, burning, blood-letting, emetics, purgatives, or massages. A burning blue rag may be snuffed and the smoke inhaled to weaken or frighten out the evil spirits, especially during childbirth. Charms and holy phrases written on paper may be soaked in a liquid and then drunk in order to internalize the holy power. The spittle of a holy man may be applied to the disturbed organ of the body. The patient's name may be changed in order that the evil spirit may somehow be misled and lose the patient, or never find him. Drastic measures of a painful nature may be utilized in order to force out the spirit.

"(5) Finally, the local practitioner leaves a token with the patient--to serve as a tangible reminder of the practitioner and his visit and to symbolize the tremendous powers at work in defense of the patient." (The comparability between these strategies and those of the family doctor making a western-style house call should be noted.)

The patient receiving this treatment is emotionally able to endure the physical discomfort during treatment and is mentally prepared for possible death should the treatment not succeed. Success is defined as ejecting the spirit or evil eye from the body. If the patient dies, it is interpreted as meaning the patient or the family had consciously or unconsciously committed such offenses in attracting the evil eye or permitting evil spirits to enter the body that no power was able to avert the evil and save the patient.

Both patient and the folk practitioner operate within a cultural framework which explains their respective actions. Thus, the system is characterized by trust and little cynicism. (Hamady, 1960)

The type of folk medical practitioner used depends primarily on the ailment and the sex of the patient. Operating within this medical system, there are several types of local practitioners who specialize in areas and methods of treatment. The specialists also vary in sex, role, status, and reward. (Shiloh, 1968)

The local practitioner called upon to treat the external body has relatively little status and received minimal rewards. Frequently, in rural areas, the local barber or shepherd has acquired an extensive knowledge in this area and is the primary provider of such treatment.

The area of gynecology, obstetrics, and pediatrics is under the authority of women who have acquired experience of these subjects and who are no longer menstruating. In addition to utilizing the concepts and practices based on animism and animatism, these women possess a careful knowledge of local pharmacopeia and a shrewd grasp of the social and emotional factors surrounding each case.

The "local pharmacologist" also functions as a specialist in some areas. This person possesses an extensive knowledge and stock of lotions, potions, herbs, and drugs from plants, animal, and mineral sources considered to be useful in treatment.

The practitioner responsible for preventive and curative medicine to the internal body is the highest status medical practitioner. This is commonly an older male of religious-medical standing. The interrelationship of religion and medicine as practiced on the internal body tends to surround this role with awe. This practitioner is clearly a knowledgeable person. Not only does he have access to a wide variety of diagnoses and treatments, but he has a sensitive ability to understand the interrelations of his patient, the family, and the community.

Additionally, it should be noted that home care is most common, but there are other places of treatment. These locations have special positive powers often derived from association with holy or powerful people.

The Interaction of Middle Eastern and Western Systems

Cultural change in the middle East has been rapid since World War I. These changes are most evident in the expansion of western educational programs. These changes have affected social relationships at community and family levels. But the belief system that underlies the Middle Eastern conception of health has not been radically changed. (Darity, 1965; Shiloh, 1968; Good, 1976; Powers, Darity, 1958)

Despite the apparent glaring differences between this system of medicine and that of the West, methods of integration of the two systems have been proposed. (Darity, 1965; Shiloh, 1968). Shiloh (1968) presents an analysis of both medical systems and potential areas of blend and conflict.

The curative medicine of the West is markedly more effective than that of the Middle East. The success of most of these techniques is generally accepted by Middle Easterners. This is evidenced by the high degree of acceptance of western medical practices. (Shiloh, 1968; Good, 1976). The serious problem arises in dealing with preventive medicine to the internal body. Both systems have complex methods, each with strong belief systems as sources of validity. However, as Shiloh (1968) points out, both systems attach different aspects of the problem.

Western medicine is concerned with providing an accurate diagnosis of a complex of symptoms derived from a biomedical model. Middle Eastern medicine is concerned with the cause of a set of symptoms based upon the concepts of the evil eye and evil spirits. The western preoccupation is with preventing the activities of germs while the Middle Eastern preoccupation is with preventing the activities of the evil eye or evil spirits. The two activities complement each other and do not necessarily conflict.

A careful awareness of the complex medical system, of philosophy and practices carried out by local socially recognized medical practitioners in specific locations is the first step. A searching analysis of the local medical system for areas of possible blend is next. A therapeutic strategy can then be developed that tolerates and respects both medical systems.

CONCLUSIONS

This paper began with definitions of social interaction and culture that portray the dynamic and pervasive operations of these entities in daily life. In considering health, it is clear that the culture of a people is a necessary

context in which to view health. Indeed, the people's perception or the emic view is a critical tool in planning or assessing health care and health needs. The brief descriptions of various health belief systems in Asia, Africa, and the Americas illustrate that integral relationship. Those descriptions also provide a flavor for the many variables to be considered when introducing modern medical technology into those cultures. Guides to literature that describe in more detail the substance and form of these variables were offered for direction.

Understanding a health culture can be facilitated by the use of a framework upon which any culture forms its health delivery system. The second part of this section describing conceptions of health reviewed literature that provides a framework. This included generic responses to illness and the principles that support the shaman/doctor-patient relationship in any culture. Despite the divergent explanations of health and illness, it is clear from this literature that people in developing countries, in contrast with the medical view in the West, believe that health may be affected by almost any aspect of behavior and the environment. A sensitivity to that broad perspective is required to understand these belief systems.

The introduction of modern medical technologies into developing countries has been characterized by many errors. (Banta, 1969; Shiloh, 1968; Logan, 1973; Leslie, 1976). Commentaries on problem areas and errors are numerous. This presentation offers a selective review of those comments focusing on certain transcultural concerns: cross-cultural gaps; assessment; ethnocentrism; health education and training; acculturation; and new behavioral models of health and illness.

This paper demonstrates the pluralism in medical beliefs and practices that exists throughout the world and even within small geographic regions. The widespread existence of pluralism suggests that no simple explanation derived from intellectual consistency will account for the choices made by patients in a situation where many alternatives are possible.

The coexistence of modern and traditional medical systems has been fairly well accepted and is a reflection of this pluralism. An important distinction between these two systems is made by Kleinman, et al (1975): The modern medical system has standard means of evaluating existing knowledge and developing new knowledge while the other does not. Unfortunately, this quality leads the modern system to imply there is one proper system of knowledge. Although traditional systems may attempt to preserve themselves as distinct, they are willing to accept and utilize the modern system. It appears clear from this review that the modern medical system will have to adapt to such an integration.

The integration of modern and traditional medicine requires an understanding of the compositon of both. The literature suggests a distinction be made within these approaches between the medical system and the health system. The former is the set of beliefs, knowledge, practices, technology, and social groups consciously directed at promoting health and preventing or alleviating illness. The health system is made up of all aspects of behavior and technology which, in interaction with the environment and population, influence the health of the people whether consciously intended or not. According to some authors (Kleinman, et al, 1975), the medical system is a sociocultural phenomenon while the health system is a broader more ecological concept. But, certainly, the medical system, as defined here, plays an important role in constructing or affecting change in the health system.

The integration of health systems would be facilitated by a conceptual behavioral frame for carrying out cross-cultural medical studies. Emerging frameworks and models have been discussed. This paper, adhering to the process of induction, has offered two specific examples of integration of traditional and modern medical systems for the development of a framework. Lamto (1969) has demonstrated that studies of the traditional treatment of mental illnesses in Africa could be used to develop a new and successful treatment approach combining traditional and modern treatments. Perhaps the most interesting case of integration is that of the People's Republic of China, where the western and traditional coexist and enjoy legitimacy. The Chinese experience presents a particularly intriguing picture of the legitimatization and official recognition (or implementation) of two medical systems (Field, 1975) that is just being revealed.

This review of sociocultural factors that affect health and health care in developing countries has followed the path of medical anthropology and sociology over time as they have emerged as a new field--the social science of medicine. This paper presents methods and attempts to view sociocultural factors related to health in various countries. It demonstrates that understanding health in a particular culture requires a careful comprehension of the sociocultural context in which health occurs.

AN ANNOTATED BIBLIOGRAPHY

SOCIOCULTURAL FACTORS THAT AFFECT HEALTH CARE DELIVERY IN DEVELOPING COUNTRIES

1.

Aamodt, A., Observations of a Health and Healing System in a Papago Community. Health Care Dimensions, 3:23-36, 1976.

This paper presents a portrayal of the healing behavior of the Papago Indians in Arizona, USA. An emphasis of the paper was on the system of meaning that supports this behavior. The author describes creature comforts, episodes of illness, accidents and ceremonies that influence their notions of health and when to seek treatment. This description of health behavior is useful as an illustration of another cultural context that defines the meaning of health.

2.

Abel-Smith, B., An international study of health expenditure and its relevance for health planning, Geneva World Health Organization (Public Health Paper, USA No. 32) 1967.

This study aims both at collecting comparable data on the sums spent by the different countries on health services and at establishing a standardized system of national accounting that will make international comparisons possible. An analysis of 33 countries shows a great diversity in the total amount and the breakdown of health expenditure by country, arising less out of real needs than out of economic conditions and cultural and historical influences. The national accounting systems in force in the different countries are such that it is not possible to determine the total health expenditure. The author stresses that a study of the cost of health services is of limited interest in the absence of a parallel study of their effectiveness, i.e., of the benefits received from them.

3.

Abel-Smith, B., Paying for Health Services, World Health Organization (Public Health Paper No. 17, USA) 1963.

This publication discusses the costs and means of financing health services in six countries. This is done less to compare than to help establish a common language. Specific and clear definitions of

economic concepts considered in regard to cost are given. These include investment expenses and everyday running expenses as well as sources of financing. Medical concepts within these categories: medical care, training, public health activities, etc. are also defined.

4.

Ackerknecht, E.H., Problems of primitive medicine. Bulletin of the History of Medicine, 11:503-521, 1942.

5. Primitive medicine and culture pattern. Bulletin of the History of Medicine, 12:545-574, 1942.

6. Psychopathology, primitive medicine and primitive culture. Bulletin of the History of Medicine, 14:30-67, 1943.

7. On the collecting of data concerning primitive medicine. American Anthropologist, 47:432-437, 1951.

8. Primitive Medicine, New York Academy of Sciences, Transactions II, 8:26-37, 1945.

9. Natural diseases and rational treatment in primitive medicine. Bulletin of the History of Medicine, 19:467-497, 1946

10. Contradictions in primitive surgery. Bulletin of the History of Medicine, 20:184-187, 1946.

11. Primitive surgery. American Anthropologist, 49:25-45, 1947.

12. A Short History of Medicine, New York, Ronald Press, 1955.

13. History and Geography of the Most Important Diseases. New York, Hafner, 1965.

Ackerknecht has published in these texts classical studies of primitive medicine. The early contributions are often based on anecdotal, impressionistic, highly biased information about medical practice in "primitive" cultures. Nonetheless these studies lead to important insights in the study of traditional medicine. The emphasis in this work was to classify and differentiate medical explanations from indigenous settings including an assessment of the degree to which "native" practices and beliefs approximate Western ones.

14.

Adair, J. and Deuschle, K., The People's Health: Medicine and Anthropology in a Navajo Community, New York; Appleton-Century-Crofts.

This book reports the work of interdisciplinary team research in illness and healing among contemporary Navajo communities. This

text provides a useful description of the integration of research in various specialized fields. This includes descriptions of means of organizing observations and deciding on similar methods for research and evaluation.

15.

Adams, Richard N. and Preiss, Jack J., Human Organization Research: Field Relations and Techniques, Homewood, Illinois, USA, Dorsey Press, 1960.

This book contains a series of articles grouped under two broad categories: Research Relations and Field Research Techniques. The first section contains articles discussing the validity of field data, cross-class interviewing, communications styles, etc. The second section is more practical in orientation—It contains articles on categories of events in field observations, mapping uses and methods, participant observation, analysis of qualitative field data and an article by J.M. Ssycos, "Sample Surveys for Social Science in Underdeveloped Areas".

16.

Ahern, Emily M., Sacred and Secular Medicine in a Taiwan Village: A study of cosmological disorders, Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, Edited by Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., 1975.

The author describes the purpose and format of this selection: In this essay I explore some of the basic concepts that play a part in Chinese villagers' understanding of bodily health or sickness. First I introduce two idioms that are used to describe the health of the body: The balance between hot and cold elements in the body and the relation between the yang body that exists in the world of the living and the yin body that exists in the world of the dead. Then I show that these two idioms are also used when discussing processes that occur beyond the human body--in human society as a whole or subgroups within it. That is, analogous vocabularies are called into play to describe procedures at two levels--the human body and human social groups. Comparison of the way these two idioms are applied to the body and to social groups will reveal not only analogies and congruencies but also fundamental dissimilarities and incongruencies. In the last part of the paper it is shown how people utilize these dissimilarities in a practical way when they seek causes and cures for illness.

17.

Amoss, A., Understanding and Working with Special Groups in Archives of Environmental Health, Vol. 20:537-539, 1970.

This is a sensitive discussion of the human behavioral aspect that

must be attended to in developing a health intervention program. "I have dwelt on the difficulties of getting a program accepted by special groups in our society. This does not mean that these difficulties are so great that it is unlikely that programs will be accepted. We have abundant evidence that changes in such fundamental things as values, goals, and expectations are taking place. What I am saying is the obvious, that in order for us to be more successful than we have been in the past, we must approach these problems with due regard for the human and personal elements in change.

18.

Application of the Social Compass to the Study of Health, Health Program Systems Center, Division of Indian Health, Tucson, Arizona (Department of Health, Education and Welfare), 1968.

This brief pamphlet describes the Social Compass, an information categorizing technique developed by Desmond Connor (1964). The Social Compass focuses attention on broad aspects of culture to aid in the gathering of information concerning patterns of culture. The information collected is "essential to the effective development of health programs." The Compass identifies 12 categories that exist in any culture as the basis of the pattern of culture. Specific questions that might be of interest in each category for the investigation of health are presented. The Social Compass reported here has been used effectively in both rural U.S. and Latin America in health services and other areas.

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Baltes, M., Health Care from a Behavior-Ecological Viewpoint. Health Care Dimensions, 3:149, 163, 1976.

This article presents an interesting interpretation of the medical model some might consider simplistic. The alternative offered by Baltes is based on operate conditioning principles and, therefore, incorporates certain assumptions about the nature of man. The model she offers is most useful for understanding and treating mental health, but its utility with illnesses of biological origin throughout the world is not well delineated.

20.

Banerji, D., "Health Economics in Developing Countries", Journal of India's Medical Association, 49, pp. 417-421, 1967.

This article emphasizes the utility of integrative health activities into general economic activities so that the health activities do not interfere with the economic system. The author stresses the role of health as a contributor to economic growth. The tasks accomplished by health economists in cooperation with planners include

the development of instruments for measuring social events; the identification of the fields of health where the maximum results can be obtained with available resources; and the furnishing of help is improving management of health services.

21.

Banta, J.E., Effecting Changes in Health Behavior in Developing Countries in Archives of Environmental Health, Vol. 18, 265-268, 1969.

In this article Banta provides his analysis of the mistakes made in transferring modern medical technology to developing nations. He discusses barriers and stimulants to health change to be found in all societies. Rather than suggest how to do it right, Banta suggests the process of health change is too complex for one solution. He suggests the way to make progress in this direction is to educate more public health specialists, emphasize health education in developing countries and stimulate research in the behavioral and social sciences.

22.

Barlow, R., The economic effects of malaria eradication, Ann Arbor, University of Michigan School of Public Health (Bureau of Public Health Economics, Research Series No. 15) .167 p. 1968

This study presents a methodology for measuring the long-term effects of malaria eradication on per capita income and applies that methodology to Ceylon for the period 1947-1966. It is based on the conclusions of P. Newman in regard to the demographic consequences of eradication (held to be responsible for 60% of the increase in the demographic growth rate observed in Ceylon). The author uses a simulated model for measuring the effects of a health programme on economic growth. When applied to eradication the model reveals the effects on the per capita income, the manpower available, and capital. The results indicate that eradication leads to a short-term increase and a long-term decrease in per capita income. The validity of the results depends on the validity of the model; the model employed seems unable to reflect the true situation, especially as regards the long-term aspect and the structural changes and interactions between demographic and economic changes.

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Beals, Alan, Strategies of Resort to Curers in South India, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

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Benyoussef, Amor, World Health Organization, Geneva; Wessen, Albert F., Brown University, Providence; Utilization of Health Services in Developing Countries--Tunisia, Social Science and Medicine, Vol. 8, pp. 287-304 1974.

This paper is based on a WHO study on determinants of utilization of government health services in a province of Tunisia (Governorate of Nabeul). Seven study areas were selected which were considered typical both of different types of health facilities and of towns and rural settings in the province. In these study areas, an interview survey of a sample of household was undertaken and the data gathered from the survey were linked to available medical records for the 3808 members of the 678 households studies.

The applicability of analyses of determinants of utilization in developed countries to the situation of developing countries such as Tunisia is discussed. On this basis, a framework for further study is developed which focuses upon modernization as the key predictor of use of health services in developing countries. Some implications and related practical recommendations for better management of the health care delivery system in the studied area are also discussed.

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Berck, A.A., Anderson, R.L., Sasali, T.T. and Kawata, K., Health and Disease in Chad, Baltimore, Maryland, The Johns Hopkins Press, 1970.

This is the report of comprehensive epidemiological studies by a team of the Geographic Epidemiology Unit of the Johns Hopkins School of Hygiene and Public Health in Chad. This book supports the conclusion that a prior prediction as to the spectrum of disease in a given population frequently may be in error. It reports on modern tools and techniques in public health assessment that were used in these field operations and comments on their validity and usefulness.

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Bice, Thomas W., and White, Kerr, Factors Related to the Use of Health Services: An International Comparative Study, Medical Case, 7(2), pp. 124-132, 1969.

This article reports the results of surveys on the use of physicians services in Chester, England; Chittenden County, Vermont; and Smederevo, Yugoslavia. The multivariate analysis results indicated that levels of perceived morbidity account for the greatest amounts of variance of utilization within each area, and that occupational level of household heads and persons' tendencies to use services are also related to utilization. The variable measuring availability (less than 15 minutes away) of medical care contributed to explaining differences in the use of physicians' services in Smederevo.

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Bingham, Walter Van Dyke & Bruce Victor Moore, How to Interview, Harper & Row, New York, 1959.

This text includes a discussion of basic principles of interviewing, the roles of the participants in an interview situation, guideposts to the interview, and the selection and training of interviewers. Besides this section on general principles, the book contains specific types of interviews in various settings: applicants for employment, oral examining in civil service, public opinion polls, vocational counseling, etc.

28.

Kloon, Samuel W., & Wilson, Robert N., "Patient-Practitioner Relationships", in Handbook of Medical Sociology, Ed. by Freeman, H.E., Levine, S. & Ruder, L.G., Englewood Cliffs, New Jersey, Prentice Hall, 315-339, 1972.

This paper elucidates various theories and treatments of the relationship between the "medical professional" and his "client". This is a contemporary discussion of the theoretical validity of various conceptions of this relationship. The author focuses not on the question of whether patterned expectations exist in this relationship, but instead, on the assumptions which different theoretical positions take about the nature of these expectations. This paper is limited in its utility by its focus on the nature of patient-practitioner relationships in modern Western society.

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Bogatyrev, I.D. & Roitman, M.P., Methods of studying the economic benefits of disease control, in: WHO Regional Office for Europe, Health Economics. Report on a seminar, Moscow, 25 June-9 July, 1968, Copenhagen, pp. 32-35, 1969.

The authors describe the application of cost/benefit analysis in the USSR to the campaign against poliomyelitis carried out in 1955. The effect of the measures was observed over the period 1958-1965. The costs of the campaign include those of the research operations effected as from 1955, vaccination, and treatment (medical visits, transport, hospitalization). The losses prevented by vaccination were estimated by evaluation of the number of new cases that would have developed if the 1958 morbidity rate had continued. The overall losses avoided included: the cost of treatment and rehabilitation; losses due to the incapacity or reduced activity of a certain number of patients and comprising the pensions paid and the loss of revenue resulting from the fall in activity; and losses resulting from deaths. Losses connected with reduction in manpower were assessed on the basis of the national income per worker (and not on the basis of the average wage). In this particular case the ratio between costs and benefits was 1:66.

30.

Brunet-Jailly, J., Essai sur l'economie generale de la sante, Paris, Cujas, 1971.

This economics thesis is an important contribution to the field of health economics and to knowledge of the health system in France. The instruments available for analyzing the health section are inadequate--particularly the national accounting systems--and do not make it possible to show how health activities are integrated with the economy. The author makes a structural analysis of the health sector. The first part studies the structure of the production units in the health sector (medical profession, establishments, etc.), their characteristics, and the manner in which they are organized to produce medical services. The second part studies the mechanisms of the health sector so as to show how the provision of medical services operates. The input is represented by work and capital (including research and teaching), the output by medical consumption, this depending on certain variables (income, urbanization, etc.). The analysis of financing reveals the decisive role of the state in the field of health and raises the problem of the rationale of state intervention. The third part considers health within the broader framework of the whole economic system. Economic analysis has recently endeavored to define the concepts and clarify the measurements of two groups of problems: the benefits from expenditure on health and the economic value of man. The author studies in detail the cost of economic activity to man (effect of working conditions on demography and the state of health and the economic cost of disease at the national level).

31.

Bryant, John, Health and the Developing World, London: Cornell University Press, The Rockefeller Foundation, 1969.

This book is the result of a broad assessment of many countries (Barbados, Brazil, Chile, Colombia, Ecuador, El Salvador, Ethiopia, Ghana, Guatemala, Hong Kong, India, Jamaica, Kenya, Malawi, Nigeria, Senegal, Sudan, Tanzania, Thailand, Trinidad and Uganda). The study was organized to: look at health problems of developing countries and to identify or suggest more appropriate approaches to the problems. The field observations occurred between late 1964 and 1967. In visiting a country the health team usually called on the Ministry of Health or, as analogous organization, studied its health care and educational programs in urban and distant rural areas. The focus is on the interrelationships of health needs, health care systems, and the education of health personnel.

The text is classic in the field. It provides very useful descriptions and analyses of various health problems and how they have been treated and mistreated. In the overview Bryant offers "The Search for Solutions" and some transcultural principles of health care that are particularly useful.

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Candill, William, The Cultural and Interpersonal Context of Everyday Health and Illness in Japan and America, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

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33.

Carr, Willine & Wolfe, Samuel, Unmet Needs as Sociomedical Indicators, International Journal of Health Services, Vol. 6, No. 3, 1976.

This paper discusses the Meharry Medical College Study of Unmet Needs designed to measure the effectiveness of alternative health care delivery systems: (a) comprehensive care with broad outreach, (b) comprehensive care with limited outreach, and (c) traditional care. Unmet needs are defined as the differences between services judged necessary to deal appropriately with health problems and services actually received. The central hypothesis is that comprehensive health programs will be more effective than traditional care in reducing unmet needs. Unmet needs are viewed as measures of program outcome and are one of several types of sociomedical indicators which use factors other than biomedical or biological states as measures of outcome. The distinction is made between unmet needs indicators and health status indicators.

Various approaches to measuring unmet needs are discussed and the relatively limited focus of these is contrasted with the more comprehensive Meharry approach. Household interviews and clinical examinations provide the data base for deriving professional judgments of unmet needs in the medical, dental, nursing, and social services areas. The Meharry work suggests several areas in which further work on unmet needs would be useful.

Clausen, John A., "The Sociology of Mental Disorder", in Handbook of Medical Sociology, ed. by Freeman, H.E., Levine, S. & Ruder, G., Englewood Cliffs, New Jersey, USA, Prentice Hall, pp. 169-188, 1972.

This paper presents a basic discussion of the nature and definitions of major types of mental disorders. It also discusses the prevalence of mental illness over time in the United States. The author provides a social epidemiological analysis of mental disorder including the stages of becoming a patient with such a disorder. He also describes the professional resources available in the American culture to individuals with mental disorders. This section includes a description of the cultural attitudes toward these levels of treatment and the patterns of treatment at each level.

35.

Correa, H., The economics of human resources, Amsterdam: North Holland Publishing Company, 1963.

This work analyses the economic aspect of human resources, which affect economic life as production factors and as the final benefactor of socio-economic progress. Although centered on the economics of education, it is of considerable interest methodologically in relation to health economics. The productive function of work is analyzed, i.e., the factors governing the quantity and quality of the labour force. Indices established for several countries reveal differences in working capacity resulting from variations in health status or nutrition, or both combined. The quality of the labour force is governed essentially by education, which is studied in detail from two points of view: the interaction between socio-economic phenomena and the demand for education, and the link between the process of education and the qualifications obtained. The study also analyses the connection between total production and labour from differeng angles, especially the influence on production of the characteristics of the labour force (health, education, etc.) and the decisive role of education as factor in economic development.

36.

Cosminsky, S., Decision making and medical care in a Guatemalan Indian community. Ph.D. dissertation, Brandeis University, Waltham, Massachusetts, 1972.

Source not referenced.

37.

Croog, Sydney H. and Ver Stey, Donna F., "The Hospital as a Social System" in Handbook of Medical Sociology, Ed. by Freeman, H.E., Levine S. and Ruder, G. Englewood Cliffs, New Jersey, USA, Prentice Hall, pp. 274-314, 1972.

This paper discusses characteristics of hospitals in the United States. This includes descriptions of how hospitals are organized, a classification of health care institutions by function and control, status systems and cultural subsystems. This includes a description of the internal social environment of a hospital.

38.

Currier, Richard L., The Hot-Cold Syndrome and Symbolic Balance in Mexican and Spanish-American Folk Medicine, Ethnology, an International Journal of Cultural and Social Anthropology, Vol. 5(3) pp. 351-363, July 1966.

A discussion of the folk medical belief in and practice of hot-cold

classification. The author offers an explanation for the persistence of this folk medicine and describes in detail the use of these concepts in healing among Latin-Americans.

39.

DeKock Van Leewuen, J.A.C., Some Social and Emotional Aspects of Health Manpower Planning Medical Care, 7(3) pp. 261-266.

This article reports on the use of medical teams and auxiliaries to increase the quantitative output of professionals concluding that the gain has been in depth not in output. The author describes and reviews the literature in an informal style and discusses social problems that plague each approach. The paper documents the conflict that is fairly common in health delivery teams. He attributes the majority of it to status differences and a greater need for role flexibility on the part of doctors. The article emphasizes the fact that social value systems underly health manpower planning. The author advocates thorough analysis of these systems before planning is completed. This article demonstrates the need for consideration of socio-cultural factors before manpower-planning can be effective.

40.

Douglas W., Illness and Curing in Santiago Atitlan. Ph.D. dissertation, Standard University, Standford, California 1969.

Source not referenced.

41.

Drewnowski, J. & Scott, W., the level of living index, Geneva, United Nations Research Institute for Social Development (Report No. 4), 90 p., 1966.

One of the aims of the United Nations Research Institute for Social Development is to study the links between economic and social development. Its efforts have centered on the clarification of certain basic concepts (level of wellbeing, social capital, socio-economic development, etc.) and the quantification. A level of living index was prepared and applied to certain countries. The level of living is defined as the level of satisfaction of the needs of a population ensured by the flow of goods and services it enjoys over a given period. The general level of living can be divided into several components corresponding to different groups of needs: physical (nutrition, housing, and health), cultural (education, recreation, security), and others. The final level of living index is the weighted result of a number of intermediate indicators. Statistical and theoretical problems arise, especially in relation to the weighing of the various factors. The study attempts to apply such an index to 20 countries with varying socio-economic levels. Despite the limited conclusions that can be drawn from it, it shows the importance of such an index in the measurement of levels of development.

42.

Dube, S.C., Cultural Factors in Rural Community Development, The Journal of Asian Studies, 16:19-30, 1955.

The author reports cultural features of India. These include the tendency to reinterpret proffered medical innovations in terms of the dominant themes and existing needs of the society. Renovation of wells, paving of village lanes, construction of soakage and compost pits are accepted because "they look new and good," "we must do what the government asks us to do," "other villages are doing it and so we must also do it," etc.

43.

Dunn, Fred, L., Medical Care in the Chinese Communities of Peninsular Malaysia, Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, Edited by Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., 1975.

This paper is focused on medical care in the Chinese communities of Peninsular Malaysia, and especially on a preliminary view of what is known of Chinese traditional medical behavior, in all its variety. The account that follows is based upon a very limited literature (even in the Chinese language) for Malaysia and Singapore; and upon observations and interviews in the Chinese communities of Kuala Lumpur and its environs in the State of Selangor. It is added that the literature on traditional medicine in Malaysia is limited only with respect to the Chinese (and Indian) communities. Malay medicine has been the object of extensive research, at intervals over a span of at least 80 years (e.g. Skeat 1900).

44.

Dunn, Fred L., Traditional Asian Medicine and Cosmopolitan Medicine as Adaptive Systems, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

45.

Edgerton, R.B., The Individual in Cultural Adaptation: A study of Four East African Societies. Los Angeles: University of California Press. 1971.

This text provides a useful descriptive and analytic account of "mental illness" in four East African societies.

46.

Engel, G.L., The Need for a New Medical Model: A Challenge for Biomedicine, Science, Vol. 196 (#4286):129-136, 1977.

This article begins with a discussion of the controversy in psychiatry regarding the utility of the medical model. The author then provides an account of the history of the reductionist approach and the biomedical model. Finally, he discusses the limitations of this model for all of medical science and the requirements of a new medical model. He explains the functioning of this model with a discussion of grief as a disease. The article concludes with a discussion of the nature and basis of the conflicts in medicine over the psychosocial and biological components of illness. This is a very useful article for the in-depth look at modern medicine that it provides. The biopsychosocial approach has particular utility for understanding illness in developing countries and traditional or folk medicines.

47.

Evang, Karl, The Politics of Developing a National Health Policy, International Journal of Health Services, Vol. 3, No. 3, 1973.

"Since national health policy is developed through the political instruments and modalities of a given country, it would be unrealistic to prescribe a solution applicable everywhere. Health matters are 'in' in the political world, due partly to the rapidly rising cost of medical care and related social services, and partly to pressure groups which have become aware of the potentialities of health services in the population. Also, the 'man-consuming' sector of society, industry and war machines, can use man as he is produced by nature only to a limited extent; more must, therefore, be invested in his health. The emergency period in health protection and promotion is over in the richer parts of the world. However, few countries have yet produced a national health policy. The difficulties encountered in this process are discussed, and it is suggested that a great deal can be learned from the initiative, in the 1920s, of a recommendation by the Health Section of the League of Nations that every country develop a national food policy. It is argued that it is time for the World Health Organization to urge its member states to develop and introduce a national health policy."

48.

Fabrega, H., Disease and Social Behavior: An Interdisciplinary Perspective, Massachusetts: Massachusetts Institute of Technology, 1974.

This book provides a theoretical analysis of the role of social science in medicine. The text is divided into three parts: (1) a review and criticism of traditional approaches in social medicine that includes a brief review of social and cultural literature on

illness, social biology of disease and limitations of ethnomedical studies; (2) the analytical foundations of socio-medical study that includes discussion of traditional disease definitions alternative formulations of disease and a model of illness behavior; (3) potential contributions of socio-medical study to disease concepts, psychosomatic illness, the organization of medical care and future research. Fabrega has made a substantial contribution to the literature that merges behavioral science and medicine.

49.

Fabrega, H., The Need for an Ethnomedical Science, Science, Vol. 189 (#4207):969-975, 1975.

Fabrega presents his interpretation of the logic of biomedical disease conceptions. He explains in this manner how "modern" medicine is the folk medicine of the "modern" world with limited validity. The author describes ethnoscience and an ethnomedical approach to disease. He suggests with this approach that universal indicators of disease rooted in social categories be used as indices of illness. This behavioral approach is extended to treatment, diagnosis, and research. Fabrega discusses the practical and contemporary implications of such an approach and how this would move us toward a theory of human disease. This article provides a succinct and useful analysis of current modern medicine and the biomedical model of disease. The ethnomedical approach he suggests has particular relevance to developing countries.

50.

Fee, E., Women and Health Care: A Comparison of Theories, International J Health Service, 5. 3. p. 397-415, 1975.

"There are three distinct approaches to the analysis of women's position in society, and thus of women's relation to the health care system. Liberal feminists seek equal opportunity within the system, demand equal opportunity and employment for women in health care, and are critical of the patronizing attitudes of physicians. Radical feminists reject the system as one based on the oppression of women and seek to build alternative structures to better fill their needs. They see the division between man and woman as the primary contradiction in society and patriarchy as its fundamental institution. They have initiated self-help groups and women's clinics to extend the base of health care controlled by women in their own interests. Marxist-feminists see the particular oppression of women as generated by contradications within the development of capitalism. Women's unpaid labor at home and underpaid labor in the work force both serve the interests of the owners of capital. The health care system serves these same interests; it maintains and perpetuates the social class structure while becoming increasingly alienated from the health needs of the majority of the population."

51.

Field, Mark G., The Concept of the "Health System" at the Macrosociological Level, Social Science Medicine, Vol. 7, pp. 763-785, 1973.

"The health system is defined as that aggregate of commitments or resources which any national society "invests" in the health concern, as distinguished from other concerns. The health system is viewed in a structural-functional perspective; it provides services to individuals whose role performance might be jeopardized by ill health and it occupies a specific structural position in social space. The approach is also macrosociological, evolutionary or historical, dynamic, relevant, and comparative. It seeks to test the hypothesis of a "convergence" of the health system of industrial societies toward a fairly common pattern under the impact of certain types of universal constraints.

52.

Field, M., Comparative Sociological Perspectives on Health Systems: Notes on a Conceptual Approach in Kleinman et.al. (eds) 1975.

This paper provides a conceptual scheme to describe, analyze and compare the nature structure, role and functioning of the "health system" of any culture. This article draws from other publications by field. It includes a sociological definition of the generic "health system", a cultural and a systems analysis. In this paper there are some brief applications of these concepts to East Asian and the Chinese medical system.

53.

Field, M., The Modern Medical System: The Soviet Variant in Leslie, C. (Ed.) Asian Medical Systems, London: University of California Press, 1976.

This selection offers a conceptual analysis of the modern medical system and contrasts the western approach to that of the Soviet Union. This is useful for its conceptual analysis and as a description of the Soviet model. The discussion of the Soviet system also provides a perspective on the influence of political/idiologies as they affect a health system.

54.

Foong-San, Soong, Some Beliefs and Practices Affecting Health of the Aborigines (Orang asli) of Bukit Lanjas, West Malaysia. Southeast Asian Journal of Tropical Medicine and Public Health, Vol. 3(2):267-276, 1972.

This article reports the author's investigation of some of the belief and practices affecting the health of a small group of aborigines living in Bukit Lanjas. The author discusses the history of the

people; traditional beliefs and practices; the role of medicinemen; techniques of prevention of sickness; contact with non-traditional medicine. The author concludes that despite their use of modern curative services, they have not accepted scientific explanations of causation of illness.

55.

Foster, G., Relationships Between Spanish and Spanish American Folk Medicine, Journal of American Folk Medicine, Vol. 6, pp. 201-219, 1953.

This article provides an account of the history of humoral medicine. It includes tracing of humoral science from Greece and Rome to the Arabic world; the introduction of this tradition into Iberia with the Moorish occupation of that region; and the diffusion to Central and South America.

56.

Foster, George, Relationships Between Theoretical and Applied Anthropology: A Public Health Program Analysis, Human Organización, Vol. 11 (3) pp.5-16, 1952.

This article addresses a research problem: how can the anthropological axiom - "in order to work with a people it is essential to understand their culture" - be translated into terms that would be meaningful to administrations of public health programs in developing countries? The article includes brief descriptions of folk medicine in Latin America and descriptions of the quality and nature of interpersonal relations. The author makes a series of program recommendations for successful public health projects, and includes examples of the successful use of these recommendations. In addition, five anthropological concepts or methodologies are discussed with relevance to this research endeavor. Those concepts are functionalism, cultural relativism, creole culture, the comparative method and the justification for generalized anthropological field work.

57.

Foster, G., Tzintzuntzan, Mexican Peasantries a Changing World, Boston, Little, Brown and Company, 1967.

Source not referenced.

58.

Foster, George, Traditional Societies and Technological Change, 2nd Edition, New York: Harper and Row, 1973.

This is a very useful guide to understanding the many implications of

providing technical assistance to developing countries. The author's viewpoint, as an American considering intervention, is also instructive. The section entitled "Ethics in Planned Change" is useful as a history of this tradition that discusses political, moral and value issues that don't receive enough attention in the literature.

59.

Fox, Renee, The Sociology of Modern Medical Research, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

60.

Frank, J.D., Persuasion and Healing, Baltimore, Johns Hopkins Press, 1961.

Frank posits that certain specific emotional states accompany the condition of disability that is brought about by underlying disease processes of a biomedical nature. These emotions are analogous to those Western man has labeled as hopelessness, despair and anxiety. The consequences of these emotions for the sick person are negative, probably through the hormonal imbalances with which they are associated. These hormonal conditions contribute to a deterioration of physical status: at the same time, the behavioral correlates of these emotions can interfere with proper rest, hydration and nutrition, which aid the body in its attempts to fight the disease process.

61.

Edited by Howard E. Freeman, Sol Levine and Leo G. Ruder, Handbook of Medical Sociology, Prentice Hall Inc., Englewood Cliffs, New Jersey, USA, 1972.

This is a basic textbook in the area of Medical Sociology. It discusses at a theoretical level various aspects of health services. This includes discussions of the sociology of illness (social factors, social-psychological factors, addictive disorders and mental illness); practitioners patients and medical settings (medical education, dental practice, nursing, quasi-practitioners, the hospital, patient practioner relationships); sociology of medical care (health organizations, medical practice, community public health, politics of health); strategy, method and status of medical sociology in its history (methods of research, historical perspective). The book includes a bibliography relevant to this field.

62.

Gallagher, Eugene B., Lines of Reconstruction and Extension in the Parsonian Sociology of Illness, Social Science and Medicine, Vol. 10: pp. 207-218, 1976.

"Talcott Parson's paradigms of the sick role and the therapeutic relationship form the basis for his sociology of illness and have provided the impetus to a substantial amount of empirical research and conceptualization in medical sociology. These paradigms are linked to the conceptions of illness as deviance and the physician as an agent of social control. In the author's opinion, further theoretical development is necessary to account for significant health/illness phenomena which the deviance conception cannot encompass. The phenomena under consideration are: (1) chronic illness, wherein there is no possibility of the patient's return to health; (2) patient self-help and self-treatment; (3) the acquiescent posture of the medical profession in the face of widespread health-risking behavior; (4) the failure of many health institutions to promote maximum rehabilitation in patients; and (5) the contradiction between the high position of personal health in the hierarchy of American values and the extent of preventible ill health. Later Parsonian formulations which view illness as impaired adaptive capacity rather than deviance, and which attribute less importance to social control and to medical instrumentality, offer a fruitful prospect for a more thorough-going conceptualization."

63.

Gallin, Bernard, Comments on contemporary sociocultural studies of medicine in Chinese societies, Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, edited by Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., 1975.

This paper summarizes a series of papers in this original source. The author's main point is: "So long as traditional Chinese values persist it is likely that the efficacy of secular Western and Chinese medicine will be fully realized only if they are utilized in combination with traditional sacred Chinese medicine. Curing requires a concern for both the physiological and sociopsychological aspects of illness. So long as secular medical systems do not demonstrate both of these concerns, then we can expect to find the continued utilization of the sacred medical system along with them. In addition, so long as secular, scientific biomedicine remains fallible, even those illnesses perceived to be caused from within the body will continue to be treated by traditional Chinese sacred medicine."

64.

Garrett, Annette, Interviewing: Its Principles and Methods, Family Welfare Association of America, New York, 1942.

This book presents basic information on how to interview, interviewer's attitude and essentials of good interviewing. The "essentials"

section provides a number of practical hints about the physical setting of the interview, how to record information, the confidential nature of the interview and the importance of background knowledge on the part of the interviewer.

65.

Glittenberg, J., Adapting Health Care to a Cultural Setting, American Journal of Nursing, Vol. 74 (12):2218-2221, 1974.

This article describes medical techniques and strategies of treatment used in the Guatemalan highlands. The author stresses the use of the cuandero and grujo as well as the modern medical doctor by the people and the acceptance of that situation by the modern medical doctor.

66.

Good, B.J., The Professionalization of Medicine in a Provincial Iranian Town in Health Care Dimensions, 3:51-65, 1976.

This paper describes the rise of modern medicine in a provincial town in Iran. The author uses two case studies to demonstrate that the professionalization of modern medicine in this area is a process involving active competition among a variety of medical practitioners for the right to practice medicine. This article is useful as a portrayal of the politics involved in bringing modern medicine technology to developing countries. It also depicts the political play involved in the integration of service and health planning.

67.

Graham, Saxon and Ruder, L.G., "Social Factors in the Chronic Diseases", in Handbook of Medical Sociology, Ed. by Freeman, H.E., Levine, S. and Ruder, G., Englewood Cliffs, New Jersey, USA, Prentice Hall, pp. 63-107, 1972.

This paper discusses and presents the theory behind social epidemiology--a method for tracing disease causation through social phenomena and agents. The author emphasizes the role of stress and measurements of social stress as they affect health. Status changes and status inconsistencies that produce stress and create illness conditions are discussed. Social factors affecting the recovery process and rehabilitation are also included. This paper is only focused on Western culture. The examples are of Western health problems, most frequently cancer.

68.

Gracia, M.F., Analysis of Incidence of Excessive Alcohol Intake by the Indian Population in Montana, Medical Anthropology, Grollig; Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

69.

Grollig, Francis and Haley, Harold, Medical Anthropology, Paris: Mouton Publishers, 1976.

This volume contains papers given at the Pre-Congress Conference on Medical Anthropology held in 1973 at the Stritch School of Medicine of Loyola University of Chicago. Papers representing four themes and a summary position paper within each are presented. The four themes are native and cultural aspects of healing; specific subject papers; interaction of traditional and Western medical practices; and theoretical aspects of medical anthropology.

70.

Grottanelli, Vinigi, L., Witchcraft: An Allegory? Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

71.

Haley, Harold B., Endemic Goiter, Salt, and Local Customs in Central America: Prevention of a Preventable Disease, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

72.

Guidelines for Gathering Cross-Cultural Information, Office of Program Development Publication, Indian Health Service, U.S. Department of Health, Education and Welfare, April, 1970.

This brief (12 pages) paper provides basic principles and considerations for the acquisition of health information from a culture different from that of the inquirer. Using the American Indies culture as an example the paper presents ways of identifying bias in the inquirer and the culture being studied. The paper presents format and basic considerations to be made when collecting data through interviews. Survey questionnaire techniques are presented with an emphasis on practical problems and solutions. Also included is a brief statement on reporting and the interpretation of data collected by these methods. The paper includes an annotated bibliography on research techniques. This is a useful paper for preparation and training of those who conduct interviews or administer and design survey questionnaires.

73.

Harrison, Ira and Cosminsky, Sheila. Traditional Medicine, An Annotated Bibliography of Africa, Latin America and the Caribbean New York: Garland Press 1976.

This text provides 1135 annotated references concerned with Africa, Latin America and the Caribbean. The topics covered include: general traditional medicine, ethnomedicine, ethnopharmacology, health care delivery systems, maternal and child health, mental health and public health.

74.

Hart, D.V., Bisyan Felipino and Malayan Humoral Pathologies: Folk Medicine and History in Southeast Asia. Data Paper 76, Southeast Asia Program, Department of Asian Studies, Cornell University.

Source not available. Referenced in Logan, 1973.

75.

Hatwood, A., The hot cold theory of disease: implications for treatment of Puerto Rican patients, Journal of the American Medical Association, 216:1158-1158, 1971.

This article presents data from three sources: observations of medical practices in 64 Puerto Rican households; responses to a questionnaire concerning postpartum practices and infant care administered to 27 mothers; and anecdotal reports from medical personnel at the Martin Luther King, Jr. Neighborhood Health Center. Hatwood reports useful data about the naive integration of traditional and modern medicine made by these people.

76.

Health Training Resource Material. Program and Training Journal, Action/Peace Corps.

This training manual includes a chapter on culture resource material providing sensitization for Americans dealing with health problems in developing nations. Topics discussed include values in American culture, the cultural context of health education, problems of introducing public health programs in developing areas, and the role of beliefs and customs in sanitation programs. The second chapter presents "how to's" for community health education. Discussions include the group approach to introducing new ideas, community organization aimed at encouraging village people to want to use a latrine, a case study of a project to bring latrines to a rural community, a suggested outline for use by countries in discussing health education of the public, and documentation of community data. The third

chapter provides sanitation resource materials related to basic health sanitation, safe drinking water, clothes washing, personal hygiene, dishwashing, household pest eradication, waste disposal, food storage and preparation, and infant care. The final chapter discusses school health education with "how to's". Topics include the contribution of teachers to child health, correlating health with other subject areas, suggestions for a health teaching unit, learning activities, a draft syllabus for health education of ages 6-11, and health education of the tropical mother in feeding young children.

77.

Helt, Eric, H., Economic Determinism: A Model of the Political Economy of Medical Care, International Journal of Health Services, Vol. 3, No. 3, 1973.

"Existing economic models of the medical care sector are characterized by unrealistic assumptions concerning (a) the relationship between medical care and health, (b) the economic behavior of both consumers and providers of health care, and (c) the nature of politics in the American culture. The model of the economy of medical care proposed here attempts to correct for these logical and empirical inconsistencies. The central argument is that the medical care system promotes not the health of the people, but instead, economic, political, and cultural inequality for a health profession's and economic elite. When stresses within the medical system threaten the institutional conditions that sustain this inequality, they are reestablished through state-sanctioned collective action."

78.

Honigman, J.J., Handbook of Social and Cultural Anthropology, Chicago, Rand McNally, 1973.

A standard cultural anthropology text. This book includes a useful chapter entitled "Medical Anthropology."

79.

Hyman, Hubert H., Interviewing in Social Research, University of Chicago Press, Chicago, Illinois, 1954.

This book provides information about the effect of the interviewer on the interview situation. This subject is discussed in some detail. The following chapters are particularly useful to persons interested in the effect of the field interviewer on the interview situation and upon the validity of the data collected: A Frame of Reference for the Study of Interviewer Effect; Sources of Effect Deriving from the Interviewer; Interviewer Effect Under Normal Operating Conditions; Reduction and Control of Error.

80.

Hughes, C., Of Wine and Bottles, Old and New: An Anthropological Perspective on the 'New' Family Physician. Health Care Dimensions 3:37-49, 1976.

The author suggests that the revival of the family physician in America is a response to basic socio-psychological needs in episodes of illness. The article relates the functions of the shaman to those of the family physician to support a cross-cultural phenomenon. It includes a detailed description of the therapeutic techniques of a shaman "in action" among the Apache Indians of the American Southwest.

81.

Imperato, Pascal J., Nomads of the West African Sahel and the Delivery of Health Services to Them, Social Science and Medicine, Vol. 8, pp. 443-457, 1974.

"This paper presents the experiences had in delivering health services to pastoral Tuareg and Maure nomads living in the West African sahel. Because of the rudimentary nature of the existing general health services structure and existing attitudes towards health services among nomads, the mass campaign technique was employed. Between 1968 and 1971 campaigns were directed at Tuareg and Maure groups living in Mali, Mauritania, Niger, Senegal and Upper Volta."

82.

Imperato, P.J., Traditional Medical Practitioners Among the Bambara of Mali and Their Role in the Modern Health Care Delivery System, Department of Health, City of New York and Ministry of Public Health and Social Affairs, Mali, Trop. Geogr. Med. 27 (1975) 211-221.

"The Bambara of Mali, who are sendentary agriculturists, number about two million and are the most important ethnic group in the country. They are gradually being Islamized, but retain many animist beliefs. Their traditional medical care system possess a heterogenous group of practitioners who have either an animist or an Islamic culture reference. The traditional medical care system of the Bambara was studied, and an evaluation of the quality of its practitioners made on the basis of a survey conducted in 128 villages over an eight-year period. During the study, patients, traditional practitioners and modern health workers were interviewed and their attitudes towards one another recorded and analyzed. Certain categories of traditional practitioners have a definite constructive role to play in a modern health care delivery system. Others, however, have had a long history and high incidence of charlatanism. Legitimazation of these categories and their incorporation into the modern health care system is not recommended."

83.

Jaspan, M.A., Health and Illness in Highland South Sumatra, Social Anthropology and Medicine, Edited by Loudon, J.B., New York: Academic Press, 1976.

This ethnographic account presents an analysis of traditional environmental knowledge and its relation to concepts of health in a particular cultural context. The author also describes conceptions of illness and diagnostic categories among these people. He provides a developmental perspective on disease and illness.

84.

Ingham, J.M., On Mexican Folk Medicine, American Anthropologist, 72:76-87, 1976.

A description of folk medicine and practices related to health and diet in Mexico.

85.

Jelliffe, Derrick B., & Bennett, F. John, "Cultural Problems in Technical Assistance" in The Cross-Culture Approach to Health Behavior, Ed. by Lynch, L.R., Cranbury, New Jersey, USA, Associated University Presses, Inc., pp. 43-58, 1969.

This article focuses on difficulties in conducting research on and providing technical assistance in developing countries. The technical assistance he uses as an example is maternal and child health care. The article focuses on the difficulties in collecting data, the unreliability of and problems with statistics and the interference or non-compliance a culture may provide with beliefs, rituals and taboos. The article presents insights into these difficulties and methods of surmounting or dealing with them.

86.

Johns, Lucy, Chapman, Thomas, and Raphael, Morton, Guide to Financial Analysis and Introduction to Economic Impact Analysis for Health Planning, U.S. Department of Health, Education and Welfare. Public Health Service. Health Resources Administration. Bureau of Health Planning and Resources Development. Division of Planning Methods and Technology. National Health Planning Information Center. DHEW Publication No. (HRA 76-14513) June 1976.

This third publication in the Health Planning Methods and Technology series is a guide for health care planners for performing economic and financial analysis of health care service projects. The guide presents basic concepts and theories in health economics and institutional finance. It offers to planning agency staff, review

committee members, and agency board members an approach for reviewing the financial feasibility of health service projects. The concept of economic impact analysis is also introduced.

87.

Kapur, R.L., Mental Health Care in Rural India: A Study of Existing Patterns and Their Implications for Future Policy, Brit. J Psychiat. (1975, 127, 286-93).

Three separate studies were carried out to examine the patterns of mental health care in an Indian village. The first examined the conceptual frameworks of the various traditional and modern healers. The second was an attitude study inquiring about the type of healer favoured for psychiatric consultation. The third was a population survey in which every person with one or more symptoms was asked if he or she had consulted anyone for relief of distress. A conclusion was reached that any scheme for introducing modern psychiatry into rural areas should make use of the locally popular healers, both traditional and modern.

88.

Kiev, A., Curanderismo: Mexican American Folk Psychiatry, New York: Free Press 1968.

This book makes an important contribution to cross-cultural studies of mental health. It is very useful for understanding the belief systems in Mexico and how these affect mental as well as physical health.

89.

Kiev, A., Magic Faith and Healing: Studies in Primitive Psychiatry Today. London: The Free Press of Glencoe, Collier-Macmillan Limited 1964.

It is the aim of this anthology to underline certain of the common as well as unique elements in the healing methods and beliefs of various groups throughout the world for the value such clarification will have in providing a clearer perspective on social and cultural factors in psychotherapeutic processes. This is a fundamental text in the cross-cultural examination of mental illness and treatment.

90.

King, Maurice, Cross-Culture Outlook in Medicine in Medical Care in Developing Countries, Ed. by King, M. (Nairobi, Africa, Oxford University Press) Chapter 4, 1966.

ing makes the point that culture is equivalent to the sum total of the customs, beliefs, attitudes, values, goals, laws, traditions

and moral codes of a people. It is invisible. In remarking on the importance of understanding a culture he notes that usually one accepts the visible parts of a strange culture and unconsciously grafts onto them invisible elements from one's own culture. He asserts that a deliberate cross-cultural view is necessary for the purpose of an efficient and effective application of techniques. This brief paper is useful for the limited specific questions it suggests should be asked to obtain a cross-cultural view.

91.

King, Maurice, Medical Care in Developing Countries, A Primer on the Medicine of Poverty and a Symposium from Mahgrere, (Nairobi, Africa, Oxford University Press, 1966.

This symposium was compiled as a tool for doctors working in developing countries and students preparing to work in them. The author posits that medical care in developing countries is a major challenge and that it has a distinctive quality. "Medical care is the study of how the fundamental knowledge embodied in medicine and publid health can best be applied to the benefit of a community." The symposium presents actual methods to be used in developing countries to provide the results of medical care. The text includes methods and manuals available on virtually every aspect of medical care (e.g., blood transfusion, anesthetics, maternity care, immunizing children under 5 years, diarrhea in childhood, the economy of a district hospital, the architecture of hospitals and health centers, administration and teaching, etc.).

92.

King, Stanley, "Social Psychological Factors in Illness" in Handbook of Medical Sociology, Ed. by Freeman, H.E., Levine, S., and Ruder, G., Englewood Cliffs, New Jersey, Prentice Hall, pp. 129-147, 1972.

This paper presents the position that the etiology of disease must be considered multi-causal. The author discusses three ways in which social psychological factors can be associated with disease: Psychosomatic--where an individual's interpersonal environment causes disease; psychological and social variables that facilitate the action of biological or physical disease agents; lifestyles or customs that result in vulnerability to disease. Within each of these categories King presents theories or examples accounting for the affects and process of these psychological factors impacting as idsease. This paper emphasizes the importance of expectations regarding cause and treatment that affect the perception of being ill.

93.

Kiteme, Kamuti, Traditional African Medicine, Medical Anthropology, Grollig, Francis, and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

94.

Klarman, H.E., The distinctive economic characteristics of health services, Journal of Health and Human Behavior, 4, pp. 44-49, 1963.

The author describes the specific economic characteristics of health services that differentiate them from other services. Medical care corresponds to an objective need, not linked to ability to pay, and is regarded as having priority. Illness cannot be foreseen in terms of individuals but can be foreseen in terms of groups, so that the financial resources to cope with it must be calculated on an overall basis. The "consumer" has no clear idea of the effectiveness of medical care, which he can judge only with difficulty. The profit motive is lacking in certain cases and cannot be used to explain behavior. Health and education are sometimes "linked products", in the case of university hospitals for example. Economic systems play an important part, especially in the field of prevention.

95.

Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and other Societies, Department of Health Education and Welfare, Publication No. (NIH) 75-653, 1975.

This book includes papers and discussions from a conference held in Seattle, Washington, USA, February 1974. It is a publication of Geographic Health Studies, John E. Fogarty International Center for Advanced Study in Health Sciences 1975. The series of papers include field research reports (epidemiological, anthropological, and clinical) in the areas of Chinese culture and medicine, psychiatry and public health. A section on contemporary socio-cultural studies is particularly useful. These papers relate contemporary and historical views on medicine in Chinese societies.

96.

Kochar, V.K., Schad, G.A., Chowdhury, A.B., Dean, G.G., and Nawalinski, T., Human Factors in the Regulation of Parasitic Infections: Cultural Ecology of Hookworm Populations in Rural West Bengal, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

97.

Kriesberg, Harriet M., Wu, John, Hollander, Edward D., and Bon, Joan. Methodological Approaches for Determining Health Manpower Supply and Requirements (2 Vols.) U.S. Department of Health, Education and Welfare, Public Health Service. Bureau of Health Planning and Resources Development. Division of Planning Methods and Technology. National Health Planning Information Center, DHEW Publication No. (HRA) 76-14512.

This second publication in the Health Planning Methods and Technology series describes and evaluates various methods used to determine present and future health manpower supply and requirements.

98.

Lambo, T.A., Traditional African cultures and Western medicine. In E. Poynter, ed. Culture and Medicine London: Wellcome Institute Publications.

Lambo reports on traditional African treatment of mental illness. The author uses studies of these treatment techniques to develop a new and successful treatment approach combininb traditional and modern treatments and yielding insights into psychiatric problems associated with modernization. This provides a useful illustration of the integration of modern and traditional treatments of mental illness.

99.

Landy, David, Culture Disease and Healing, New York: MacMillan and Co. 1977.

This is a very recent text on medical anthropology. It offers a very useful overview and detailed perspective in the field.

100.

Langer, A., & Henshaw, P.S., The interacting effects of public health, fertility behavior and general economy on standards of living. American J Medical Science, 230:119-127; 484-490; 605-621; 231:407-425, 1955-1956.

A global index was constructed by the authors for classifying countries in accordance with various factors (birth rate, mortality, population increase and density, calorie intake, energy consumed, income per head). Countries can be classified in broad categories in accordance with this index and the authors feel that the factor or factors stimulating or blocking economic development can be deduced. Different calculations are made in the study to discover how to maintain or improve the level of living in countries at different levels of economic development. Health activities should be undertaken in a planned and balanced manner. In the first stages of development they may well yield economic benefits as great as those of investment in other sectors.

101.

Last, Murray, The Presentation of Sickness in a Community of Non-Muslim Hausa, Social Anthropology and Medicine, Edited by Loudon, J. B., New York: Academic Press, 1976.

This article discusses field study among these people; their conceptions of medical concepts; perceptions of sickness; and the moral

and ritual aspects of sickness. This is useful as a description of cultural views of illness. An appendix offering a summary of Hausa medical concepts is also pertinent.

102.

Leeson, Joyce, Social Science and Health Policy in Preindustrial Society, International Journal of Health Services, Vol. 4, No. 3, 1974.

"In spite of unfortunate legacies from colonial days, social scientists in the health field in the Third World could make an important contribution by examining why 'rational solutions' are not applied to the multitude of problems that exist. This would require an historical analysis of the status and roles of health personnel, and a recognition of the contradictions between the interests of the metropolitan countries and the urban elites of the Third World, on the one hand, and the rural masses on the other. The principles guiding the health services of the People's Republic of China have led to very different and apparently more appropriate services, but it seems unlikely that these will be applied elsewhere under present circumstances."

103.

Leininger, Madeline, "Towards Conceptualization of Transcultural Health Care Systems: Concepts and a Model" in Health Care Dimensions 3, ed. by Madeline Leininger, F.A. Davis Co., Philadelphia, pp. 3-22, 1976.

In this brief article Dr. Leininger provides a history of her pursuit of a formal transcultural health care perspective in the health care profession. The article includes a discussion of fundamental serious problems that occur in transcultural health work: ignorance of the local people's viewpoint on health and health care systems, inattention to the social structure and various social systems of which the health system is a part; culture shock, cultural imposition of one's own values, beliefs and practices on another group, ethnocentrism regarding the American and Western health system as vastly superior. Also presented are general concepts involved in a comparative or transcultural study of health care like indigenous versus professional systems. A transcultural conceptual health model that provides general systems and sources of values and information to be studied is presented. The author suggests this model is useful to study, analyze and compare health care systems of various nations.

104.

Leslie, Charles, Asian Medical Systems: A Comparative Study, London University of California Press, Ltd., 1976.

This text is the result of the fifty-third Buy Mortenstein Symposium. The Symposium aim was to develop new lines of research in medical

anthropology through the study of Asia's medical systems. The text contains 19 articles on the following topics: the great traditions of Hindu, Arabic and Chinese medicine; the structure and character of cosmopolitan medicine; the adoptive significance of medical traditions; the culture of plural medical systems; the ecology of indigenous and cosmopolitan or Western medical practice; medical revivalism; and a perspective with suggestions for further research by the philosopher W.T. Jones who attended the Symposium.

The articles note historical development of medical traditions, methods of cure and research in various parts of Asia. An emphasis of these papers is comparative cases within each medical tradition. The editor identifies three main streams of medical practice and theory that originated in the Chinese, South Asian and Mediterranean civilizations. The historical roots of these, modern representations of them and their relationship to Western or cosmopolitan medicine are the foci of the various papers.

105.

Lessa, W.A., Chinese Body Divination, Its Forms, Affinities and Functions. Los Angeles: United World, 1968.

Source not referenced.

106.

Levin, A.L., Cost-effectiveness in maternal and child health, implications for program planning and evaluation. New Eng. J. Med., 278: 1041-1047, 1968.

This study briefly discusses the results of cost-effectiveness analysis applied to 10 maternal and child health programmes. The results are presented in terms of deaths avoided, handicaps prevented, etc. The author stresses the limits of such a method of analysis as a decision-taking tool in the health sector. It is necessary, however, so as to arouse awareness of the lack of basic data, encourage the better use of resources, etc. It should find a place in the overall analysis of the health system of which the various special programmes form part and should stimulate research on health indicators.

107.

LeVine, R.A., Culture, behavior and personality: An introduction to the comparative study of psychosocial adaptation, Chicago: Aldine, 1973.

This text provides an introduction to the field of culture and personality research. That is the comparative study of the connections between individuals (their behavior, patterns and mental functioning) and their environments (social, cultural, economic, and political). The book includes an overview of existing theories and methods related

to this interdisciplinary effort; a discussion of "population psychology," an evolutionary model of culture and personality; and a discussion of a variety of research investigating individual dispositions in certain social settings. The interdisciplinary nature of field covered by this text makes its content theoretical and hypothetical. It provides few in-depth applications to developing nations, but its principles could be applied to those people.

108.

Lewis, G., A View of Sickness in New Guinea, Social Anthropology and Medicine, Edited by Loudon, J.B., New York: Academic Press, 1976.

This article discusses main distinctions in illness; behavior in serious illness; communication with the sick person; the verbs for sickness and their implications; possible motives for behavior during illness; classification of illnesses; responsibilities in assuming sick behavior; problems of comparing illness and disease. A useful depiction and analysis of the meaning of health and illness in New Guinea.

109.

Lewis, O. Tepotzlan, Village in Mexico, New York: Holt Rinehart and Winston, 1960.

An anthropological account of life in Mexican villages. This descriptive text includes detailed accounts of healing and the preventative strategies built into lifestyles of the people.

110.

Logan, M., Humoral Medicine in Guatemala and Peasant Acceptance of Modern Medicine, Human Organization, 32 (4) p. 385-395, 1973.

This article discusses the history of humoral medicine, its structure and the functions it serves for the peasantry in Guatemala. Logan provides an analysis of the cognitive system that underlies humoral classification. He discusses and reports examples of how commitment to humoral medicine can impede effective medical care. Additionally he provides suggestions for improving health care to these people.

This is a very useful document for understanding humoral medicine and the belief system of Indians and Ladino peasants in Guatemala. Logan provides insight into how this system can be integrated into modern medicine in rural areas.

111.

Loudon, J.B., Social Anthropology and Medicine (Ed), New York: Academic Press, 1976.

This is a collection of papers presented at the annual conference of

the Association of Social Anthropologists held in 1972 at the University of Kent at Canterbury. The papers are based on field research and address three questions: what concepts have been found related to etiology or the modern medical pathological process; what notions regarding normality and deviations from that exist and how do they compare with those employed in the biomedical approach, and are distinctions made within indigenous systems of medical classification that correspond to or are more useful than the notions of disease and illness. Several of these papers are referenced separately in this document.

112.

Loveland, Franklin O., Snakebite Cure Among the Rama Indians of Nicaragua, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

113.

Lynch, L. Riddick, The Cross-Cultural Approach to Health Behavior, Cranbury, New Jersey, USA, Associated University Presses, Inc., 1969.

This text is a compilation of twenty-four separate research studies and articles on cultural groups throughout the world, including the Americas, Africa, Asia and island groups in the South Pacific. These are presented to familiarize the reader with various cultures and to convey the point that custom is the basis for thought and action. The first part of the book is a series of articles that serve as buidelines for the application of anthropological perspectives to health practices in developing countries.

114.

Maclean, C.M.U., Hospitals or healers? An attitude survey in Ibadan, Human Organization, 25:131-139, 1966.

This article focuses on the phenomenon of competing medical systems. The author illustrates how residents use, in a complementary fashion, medical facilities and personnel attached to care systems that are conceptually opposed. She includes a description of the existing Western scientific medical care system that presents an alternative to the use of traditional healers in Ibadan. The data were obtained as part of a survey funded by the British Empire Cancer Campaign, and the study provides an example of the increasing reliance on social scientists for analyses of medical care practices. Use of facilities and remedies prescribed by both medical traditions is compared by sex and social grouping. Results indicate that the "emerging middle class" does not respond to treatment of illness differently from the group living in the traditional Yoruba pattern.

115.

Madsen, C., A study of Change in Mexican Folk Medicine. Middle American Research Institute. Publication 25. New Orleans: Tulane University Press, 1965.

Source not referenced.

116.

Madsen, W., Hot and cold in the universe of San Francisco Vecospa, Valley of Mexico, Journal of American Folklore; 68, p. 123-139, 1955.

A useful account of the use of hot and cold attributions in the lives of people in this area of Mexico.

117.

Mak, C., Mixtec medical beliefs and practices. America Indigina, 19:125-150, 1959.

A description of medical beliefs and practices. Some of these have been altered over time.

118.

Martin, Katherine Gould, Medical Systems in a Taiwan Village: Ong-ia-kong, the plague god as modern physician, Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, Edited by Kleinman, A., Kinstadter, P., Alexander, E.R., and Gale, J., 1975.

In this paper the author describes the setting and background of the Ong-ia-kong cult and an evening's session with them; the kinds of ailments and treatments used; and distinctions between medical practices associated with Ong-ia-kong and the rest of health care available. Ong-ia-kong is one of the many cults in the Chinese sacred medical system. Other types of health care are Chinese secular medicine and western-style medicine.

119.

Mead, Margaret, Reciprocities Between Domestic and Overseas Health Services Inventions, Journal of Medical Education, 42:822-825, 1967.

The author discusses the needs of health care in the United States and developing nations. She emphasizes a need for a single standard of excellence for worldwide health care exclusive of race or economic status. Her depiction of developing countries includes a pride in the past as well as a willingness to participate in health care innovations. This is carefully distinct from her depiction of the

culturally deprived and disadvantaged of the U.S. Given the needs in both areas the author calls for a health profession that is nonhierarchical, independent of status based on degrees. She also suggests the creation of experimental health service centers in which developed and developing countries can work together.

120.

Mechanic, A. Medical Sociology, New York, The Free Press, 1968.

This is a basic text in medical sociology. The author has selected for inclusion what he believes to be the fifteen most important and common areas of activity in medical sociology. These are: distribution and etiology of disease; cultural and social responses to illness; socio-cultural aspects of medical care; mortality; social epidemiology; organization of medical practice; sociology of the healing occupations; sociology of the hospital; community health organizations; social change and health care; medical education; stress and disease; social and community psychiatry; health policy and politics.

121.

Merton, Robert K., Fiske, Marjorie, & Kendall, Patricia O., The Focused Interview: A Manual of Problems and Procedures, The Free Press, Glencoe, Illinois.

This book discusses one method of interviewing. A "focused interview" deals with a situation in which the interviewer is asking questions about an event or experience which is familiar to the respondent. For example, an interviewer asking questions about the service of a health center with an individual from a community served by that health center would be an example of a focused interview.

122.

Messing, Simon D., Emics and Etics of Health Problems in Ethiopia, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

123.

Messing, Simon D., Discounting Health: The Issue of Subsistence and Care in an Undeveloped Country, Social Science and Medicine, Vol. 7, pp. 911-916, 1973.

The Concept 'discounting health' is proposed as a heuristic model for analysis of differing perceptions concerning 'cost-benefit', as these relate to systems of health care. This procedure became necessary during analysis of data gathered in rural Ethiopia to measure

the effectiveness of new Health Centers. This article includes a report of an evaluation of a health care intervention program. The author proposes the "discounting health" model as an explanation of the people's perception that was not taken into account in creating and evaluating the program.

124.

Messing, Simon D., Social Problems Related to the Development of Health in Ethiopia, Social Science and Medicine, Vol. 3 pp. 331-337, 1970.

This article attempts to trace, briefly, some of the etiology of interrelated problems in a country in which traditional values have not been distorted by a foreign-established colonial period, and which has experienced only superficial change in modern times. This makes it possible to view relationships more clearly than in other underdeveloped countries where they may exist in more complex forms.

125.

Mintz, S.W., Casamelar: the subculture of a rural population in The People of Puerto Rico, J. Stewart (Ed) Urbana: University of Illinois Press, 1956.

Source unavailable for reference.

126.

Montgomery, Edward, Systems and the Medical Practitioners of a Tamil Town, Asian Medical Systmes: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

127.

Navarro, V., Systems analysis in the health field, Socio-Economics of Planning Science, 13, pp. 179-189, 1969.

Health constitutes a system that can be broken down into subsystems (hospital treatment, domiciliary treatment, etc.). It is possible to study the movement of individuals through each system (admission of patients, movements between departments, discharges). This article examines the application of systems analysis to the field of health service planning. The author reviews different planning models that have emplyed the systems analysis approach, and discusses their limitations.

128.

Navarro, Vincente, M.D., D.M.S.A., Dr. P.H., A Critique of the Present and Proposed Strategies for Redistributing Resources in the Health Sector, Medical Care, Vol. XII, No. 9, September, 1974.

This paper is divided into three parts. The first contains a brief description of the past and present distribution of physicians in the United States. In part two, it is postulated that the present strategies for change based on the 'market' ideology implicit in most types of health legislation will not correct, but may strengthen, the maldistribution. In part three, alternative strategies for change are presented, with recommendations for (1) shifting the planning and regulatory powers over the health sector from the private to the public sector, and (2) democratization of health institutions, with control of these institutions by elected representatives of both those who work in them and those in the communities who are served by them. The possibilities of adopting these strategies in this country are discussed in the light of some international experience, and with consideration of the present economic and political realities of the United States.

129.

Ndeti, Kivuto, The Relevance of African Traditional Medicine in Modern Medical Training and Practice, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

This article discusses African traditional medicine at some length. The author attempts to show the evolution of men who draw from physical, social, and humanist perspectives to provide rational explanations for life and the inevitability of death. A useful description of traditional medicine and how it needs to be integrated into modern medical practices and training.

130.

Ngubane, H., Some Aspects of Treatment Among the Zulu, Social Anthropology and Medicine, Edited by Loudon, J.B., New York: Academic Press, 1976.

This article describes social and traditional treatments of illness among the Zulu. Additionally it explains cultural beliefs that support these treatment procedures. The author suggests that causality and treatment are understandable and more significant if seen in the context of the mythology that supports the culture.

131.

Obeyesekere, Ganapath, The Impact of Ayuruedic Ideas on the Culture and the Individual in Sir Lanka, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

132.

Olesen, Virginia, Convergences and Divergences: Anthropology and Sociology in Health Care, Social Science and Medicine, Vol. 9, pp. 421-425, 1975.

Historical and social influences have shaped medical sociology and medical anthropology in similar ways, yet have produced different emphases within these disciplines. Medical sociology, in particular, bears the imprint of sociology departments where most of its practitioners, scholars and teachers have been trained. Eight major substantive problems are noted as areas where the disciplines could profitably work together.

133.

Opler, Morris E., The Cultural Definition of Illness in Village India. Human Organization, Vol. 22 (1), pp. 32-40, 1963.

This article describes the practice and meaning of Ayurvedic science in India. Opler describes in detail the explanations for sickness that are used and how treatment is integrally related to these conceptions. This article is a classic in this literature. It offers a very useful detailed description of the belief system and methods of indigenous systems of medicine in rural India.

134.

Orso, E., Hot and cold in folk medicine of the island of Chira, Costa Rico. Working Papu. Institute of Latin America Studies. Baton Rouge, Louisiana State University.

Source unavailable for reference.

135.

Paul, Benjamin, "Anthropological Perspectives of Medicine and Public Health", Annals of the American Academy of Political and Social Sciences, 346, pp. 34-43, March, 1963.

In this article Paul elucidates reasons he sees for difficulties in implementation of Western health programs of disease prevention. This is a useful description of generic problems in transmitting health technology. It serves more descriptive and awareness purposes than prescriptive suggestions for change.

136.

Paul, B., Health, Culture and Community, New York: Russell Sage Foundation, 1955.

This volume provides case material. All the cases are written by persons who were directly involved in the action or who lived in the

community long enough to assess the situation at first hand through direct observation or interview. The case studies have been selected not because they represent excellence of program or praiseworthy accomplishment but because they illuminate various facets of community process. The cases are grouped in six sections: Re-Educating the Community, Reaction to Crises, Sex Patterns and Population Problems, Effects of Social Segmentation, Vehicles of Health Administration, Combining Health and Research.

137.

Planning National Nutrition Programs: A Suggested Approach. Vol. 1, Summary of the Methodology. Office of Nutrition, Bureau of Technical Assistance, Agency for International Development.

A systems approach is proposed for planning nutrition programs. The principles of the approach and an analysis framework for the nutrition system are defined. The national nutrition system with such subsystems as the consumer, food supply, food distribution and processing, and other related systems are described. Analytical aspects of the selection of target groups and tentative goals are presented. The art of intervention is addressed; identifying types and points of intervention, comparing interventions, and evaluating nutrition intervention. A final section is devoted to strategies and tactics of nutrition planning and programming including discussions of the value of nutrition interventions, the organization of nutrition planning, and the cost of nutrition planning.

138.

Plog, Stanley C. and Edgerton, Robert B. (Editors) Changing Perspectives in Mental Illness, New York: Holt, Rinehart and Winston, Inc. 1969.

This volume contains a series of papers addressing basic questions in the field of contemporary social psychiatry. Particularly relevant to a cross cultural perspective on mental illness are these: "On The Recognition of Mental Illness," Robert B Edgerton; "Cultural Change and Mental Illness," A.F.C. Wallace; "Transcultural Psychiatry: Research Problems and Perspectives," Ari Kiev; "Cultural Variations in the Development of Mental Illness," Herbert Barry, III; "A Comparative Study of Psychiatric Disorder in Nigeria and Rural North America," Alexander Leighton; "Pathology Among Peoples of the Pacific," Ernest Beaglehole; "Mexican-Americans and Anglo-Americans: A Comparative Study of Mental Health in Texas," William Madsen; "Japanese-American Mental Illness," Harry H.L. Kitano.

139.

Polunin, I., Disease Morbidity and Mortality in China, India and the Arab World, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

140.

Porkert, Manfred, The Dilemma of Present-Day Interpretation of Chinese Medicine, Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, Edited by Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., 1975.

The author describes the nature and intent of this article: It can be summarized as an attempt to (after underscoring the fundamental methodological difference, hence the mutually complementary and not competitive nature of Chinese and Western medicines): (1) show up difficulties impeding the amalgamation of both systems; (2) demonstrate the futility of amateurish attempts, hence the necessity of purposefully directed efforts to achieve this amalgamation; and (3) give a glimpse of the vast increment of knowledge that will result if this amalgamation is positively achieved.

141.

Porkert, Manfred, The Intellectual and Social Impulses Behind the Evolution of Traditional Chinese Medicine, Asian Medical Systems: A Comparative Study, Edited by Leslie, Charles, Los Angeles: University of California Press, 1976.

Referenced under source in which this article occurs.

142.

Porkert, Manfred, The Theoretical Foundation of Chinese Medicine, Massachusetts, USA, Massachusetts Institute of Technology Press, 1974.

This book presents an historical and theoretical examination of Chinese medicine. In addition to the background it provides examples of reinterpretation of ancient theories and those of non-Western cultures into modern terms. The author cogently argues that simple translation and substitution is inadequate. What is necessary, and is demonstrated in the book is an integral comprehension of the theories within their logical and historical settings.

143.

Press, I., The urban Curandero, American Anthropologist, 73:741-756, 1971.

This article reports on the activities and methods of curanderos in urban areas. It illustrates the willingness of people to incorporate modern medical practices into their therapeutic strategies.

144.

Press, I., Urban Illness: Physicians, curers and dual use in Bogota, Journal of Health and Social Behavior, 10:209-218, 1969.

This studies the native system of curing in Bogota, Columbia.

145.

"Priorities in international technical assistance health programs." Joint statement by the Public Health Division of the Foreign Operations Administration and the Public Health Service and Children's Bureau of the U.S. Department of Health, Education, and Welfare.

This paper discusses the need for the establishment of priorities in health technical assistance to the developing world. Factors determining priorities are enumerated as: technical and administrative feasibility, early recognizable results, results attainable relative to cost, takeover ability by host country, and number of persons affected.

146.

Purdum, B., Gordon, R., Michelson, D., Health Care in Colombia in Florida Medical Association Journal, 61(11):828-830, 1974.

This article briefly describes public health programs and medical training in Colombia. This article is useful for descriptions of the government programs for public health and medical education. No descriptions of traditional treatment approaches or culture are offered.

147.

Quintanilla, A., Effect of Rural-Urban Migration on Beliefs and Attitudes Toward Disease and Medicine in Southern Peru, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

148.

Read, M., Culture, Health, and Disease, London, England, Tavistock Publications, 1966.

The first part of this book covers the essential background for understanding people's reactions to modern health programmes. The hazards to health, inherent in an exacting and often hostile tropical environment are related to people's own attempts to deal with sickness and to preserve a measure of health. These practices are presented here as a 'system of traditional care' for sick people, incorporating the concept of folk medicine and the methods of divination and healing, together with the relation of 'traditional practitioners' to modern medical personnel. In Parts II and III some of the methods and findings of social scientists who have studied these traditional systems are explained. The recognition of the dual process of social change and social continuity, and its relation to the ambivalence of people's response to health programmes is emphasized as an essential in the training of health personnel for work in rural areas.

149.

Redfield, R. and Park, M., The treatment of disease in Dzitas Yucatan, Vol. 6, Contributions to American Anthropology and History, Washington, D.C.: Carnegie Institution, 1940

This presents a pattern of hot cold classification among another Meso-American group. It also discusses in detail treatment procedures for physical and mental illnesses.

150.

Reichel-Dolmatoff, G. and Reichel-Dolmatoff, A., The People of Automa, Chicago: University of Chicago Press, 1961

A description of the cultural lifestyles of these people in South America.

151.

Rice, D.P. & Cooper, B.S., The economic value of human life, American Journal of Public Health 57, 1954-1966, 1967.

Quantification of the value of human life is not new (it is used by insurance companies) but it is encountered to an increasing extent in cost/benefit studies of health. The aim of this study is to provide precise estimates that could be used by planners. The economic value of an individual is defined by his productive capacity and based on the average income per age group, taking into account the average expectation of life at each age. Different values of human life are calculated for the USA in terms of age, race, sex, and educational level. Detailed tables are provided. The means of quantifying the value of human life presented here are based on American values. For this reason it should be used by a developing nation with caution. However, the components included in the quantification provide guidelines for others.

152.

Richardson, M., and Bode, B., Popular Medicine in Puntarenas Costa Rica: Urban and Societal Features. Middle American Research Institute, Publication 24, New Orleans: Tulane University Press, 1971

Source unavailable for reference.

153.

Roberts, B.J., Concepts and methods of evaluation in health education. International Journal of Health Education, 5, 52, 1962.

This article describes the concepts related to evaluation, particularly program effectiveness and efficiency. As is noted in the article, the

former indicates the extent of objective achievement and the latter is quantified by input-output ratios. The author stresses the notion that evaluation is a continuous activity carried out at different stages of the planning process.

154.

Robertson, L.S. & Heagarty, M.C., Medical Sociology: A General Systems Approach, Nelson Hall Publishers, Chicago, Illinois, USA, 1975.

This is a textbook in medical sociology presenting contemporary principles and theories with useful criticisms and notations of qualifications. The authors, a sociologist and a medical doctor, present the fundamentals of systems theory and discuss the relationship of social systems to disease. The applications are only drawn for Western, primarily American medical systems and health problems. The chapters with international scope are brief and contain little technical information.

155.

Robertson, R.L., Issues in measuring the economic effects of personal health services, Medical Care, 5, 362-368, 1967.

This paper sets out basic concepts in relation to the measurement of the economic effects of personal health services, essentially in terms of the working time gained by the decrease in illness and accidents. This article is based on American notions of disease and productivity. Hence, any use of it in non-Western countries should be done with caution.

156.

Rund, Nadine H., "Application of the social compass to the study of health." Health Program Systems Center, Division of Indian Health, September, 1969.

The Social Compass as a tool in comprehensive health planning is recommended. It is used to gather information focused on major aspects or patterns of culture such as health, education, religion, government, agriculture, manufacturing industry, economics, social organization and others. The elements selected to systematically focus attention upon the specific pattern are: history, space, relations, resources, technology, knowledge and belief, values, goals, norms, position, social rank, sanctions, and power and influence.

157.

Salzberger, R.D., Cancer: Assumptions and reality concerning delay, ignorance and fear, Social Anthropology and Medicine, Edited by Loudon, J.B., New York: Academic Press, 1976.

The article presents the underlying assumptions affecting the recognition of sickness. The author illustrates the universality of these

assumptions and depicts their actual influence on behavior in case studies.

158.

Schmale, A.H., Giving up as a common pathway to changes in health. In Advances in Psychosomatic Medicine; Vol. 8; Psychosocial aspects of physical illness, Ed. Z.J. Lipoloski, New York, S. Karger, pp. 20-41, 1972.

This chapter presents hypothetical psychological conditions (emotions) and processes that affect the progress of disease. The article reviews current literature relevant to Frank's (1961) evaluation of the medical-therapeutic efficacy of curing ceremonies in "preliterate settings." The issues focused on are related to contemporary psychosomatic medicine.

159.

Scrimshaw, Susan, Anthropology and Population Research Application in Family Planning Programs. Presented at the 71st annual meeting of The American Anthropological Association, Toronto, Canada, December 2, 1972.

This publication discusses the role of anthropology in population research which is defined as including demography, the relationship between culture and fertility, investigation leading to development and evaluation of family planning programs, and clinical and laboratory research on contraceptive methods and infertility. The specific contributions of anthropologists in all these areas are presented. Anthropological demography with a discussion of current research are presented. Areas where a knowledge of anthropology is likely to be important for optimum delivery of family planning services include: location of clinics, clinic hours, clinic staff, staff-patient interaction, communication, clinic procedures, ambiance and type of clinic. Topics for research on the content of family planning programs are proposed to include: culture and side effects, mode of use, cost, communication, knowledge of methods, practice of methods and attitudes.

160.

Scrimshaw, Susan C.M., "Cultural values and behaviors related to population change." Institute of Sociology, Ethics and the Life Sciences; 1977.

An overview of the relationship of cultural values and behaviors to population change is provided. Topics addressed include cultural norms and behaviors regarding family size, cultural values and population change at the family level, and cultural values and population change in terms of family planning programs. Four steps for the analysis of cultural values and family planning programs are outlined: The author states that much of the national and international bitterness over family planning appears to stem from two factors: "(1) lack of overt

awareness of the culture-specific values and behaviors which affect fertility and family size on the part of people within and outside the culture, (2) disregard (or ignorance of) these values by individuals and agencies at both national and international levels.

161.

Scrimshaw, Susan C.M., and Pelto, Gretal H., "Family composition and structure in relation to nutrition and health programs: impact and measurement." Paper prepared for a Conference on the Evaluation of the Impact of Health and Nutrition Programs, Pan American Health Organization, Panama, August 1-4, 1977.

The purpose of this paper is to aid in the conceptualization and operationalization of outcome variables for studies of the impact of nutrition and nutrition-related health programs on family composition and structure. An attempt is made to focus on outcome measures of potential utility to action programs. After a presentation of the relevance of the problem, this paper presents a model for conceptualizing the impact of health and nutrition programs on family size and structure. This model focuses on the most pertinent variables and relationships in the experience of the authors. Section three delineates some basic methodological issues, while section four presents some concrete suggestions for data collection and analysis.

162.

Shiloh, A., A Case study of disease and culture in action: Leprosy among the Hausa of Northern Nigeria, Human Organization, 24:140-147, 1965.

This is a presentation of a case study involving leprosy and its management among the Hausa of northern Nigeria. The native beliefs and orientations toward leprosy are contrasted with those of Christian missionaries who attempted to treat leprosy. Reasons for the success of the government's treatment program which involved Western scientific methods are reviewed. This article is useful as an illustration of how competing medical traditions can interact in a positive way and lead to the control of a serious health problem.

163.

Shiloh, Ailon, The Interaction Between the Middle Eastern and Western Systems of Medicine, Social Science and Medicine, Vol. 2, pp. 235-248, 1968.

The purpose of this paper is to explore the dynamics which can occur when the system of medicine of the Middle East interacts with the system of the medicine of the West. The hypothesis to be considered is that, despite the apparent striking differences between the two medical systems, planned interaction can be of a positive nature with only a limited area of possible culture conflict. This hypothesis will be

considered by first analyzing the traditional system of medicine in the Middle East and then structuring the interaction which can occur. Material from studies of the interaction of other systems of medicine with that of the West will be utilized to amplify and support the hypothesis.

164.

Siegmann, Athilia E., A Classification of Sociomedical Health Indicators: Perspectives for Health Administrators and Health Planners, International Journal of Health Services, Vol. 6, No. 3, 1976.

The conceptualization and operationalization of measures of health status are considered. Health indicators are conceived as a subset of social indicators, and therefore, as any social indicator, they are viewed as derivative from social issues. The interrelationships of different frames of reference for defining and measuring health that have accompanied three distinct health problem patterns in the United States are viewed from a developmental perspective. Mortality and morbidity rates, the traditional health indicators, by themselves no longer serve to assess health status in developed nations. Their deficiencies as indicators serve as background for a classification schema for sociomedical health status indicators that relates health definition frames of reference, measures of health status, and health problems. The role of a group of health indicators--sociomedical health indicators--in the current formulation of health status measures is assessed.

165.

Simmons, Ozzie G., Popular and Modern Medicine in Mestizo Communities of Coastal Peru and Chile, Journal of American Folklore, 68, pp. 57-71, 1955.

This article is a classic in the field. It describes the major etiological categories used to define and explain illness in these cultures. The author emphasizes the important point of the willingness of popular medicine and the people to accept a great deal from modern curing practices. The people see certain illnesses as curable by doctor's remedies, others by household or traditional and some illnesses as curable by both means.

166.

Smith, Karl A., Health Priorities in the Poorer Countries, Social Science and Medicine, Vol. 9, pp. 121-132, 1975.

The author discusses the complex problem of setting priorities in the context of needs, felt needs and demands; and of the perceptions and interests of those who finance, deliver and benefit from the delivery of health services. Related methodological difficulties in data collection are considered.

167.

Sobier, R., Gaining Awareness of Cultural Differences: A Case Example. Health Care Dimensions, 3:67-81, 1976.

This article describes the experiences of a nurse as she gained awareness of cultural differences while treating an elderly Jewish man in Belgium in 1958-1959. She recommends the importance of being sensitive to cultural differences. In addition, she recommends against the use of explicit criteria for the closing of nurse-patient relationships of a psychotherapeutic nature. This article provides a moving description of the relationship between a patient and nurse. The utility for obtaining a cross-cultural viewpoint or sensitivity is limited. The article does offer an illustration of the integration into a patient's culture and family that is sometimes expected for psychotherapeutic treatment.

168.

Sobin de Gonzalez, Nancie, L., Beliefs and Practices Concerning Medicine and Nutrition Among Lower-class Urban Guatemalans, American Journal of Public Health, 54 (10) pp. 1726-1734, 1964.

This paper attempts to describe the then-current medical and nutritional beliefs and practices among lower-class urban Guatemalans. A majority of the Ladinos studied were born in rural areas and had moved to the city in early youth. The study is based upon questionnaires and interviews examining these peoples conceptions of disease, nutrition, contagious and motivation for behavior and illness. This article is useful as a description of the folk beliefs that have survived with Ladinos integrated into a city life.

169.

Spiro, Melford, Ghosts, Ifaluk and Teleological Functionalism, American Anthropologist, 54, pp. 497-503, Oct.-Dec. 1952

Micronesia--Description of the Ifaluk religion and its impact on health and perceptions of illness. Primarily a psychological-psychoanalytic interpretation of the function of these beliefs.

170.

Spiro, M.E. Burmese Supernaturalism: A Study in the Explanation and Reduction of Suffering, Englewood Cliffs, New Jersey, Prentice Hall, 1967.

A study of indigenous medicine in Burma. This text includes detailed descriptions of the belief systems that permeate this culture; how they affect the lifestyle of people and medical treatment.

171.

Stablein, William, A Transubstantiated Health Clinic in Nepal: A Model for the Future, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

172.

Struening, Elmer L., Approaches to Evaluation: Social Area Analysis, International Journal of Health Services, Vol. 4, No. 3, 1974.

Definitions of evaluation research are given in this paper, followed by a brief history and definition of social area analysis. Three types of evaluation studies--descriptive, comparative or correlational, and experimental--are described and exemplified. The role of epidemiologic data in describing catchment areas and in the identification and location of high-risk populations is discussed. Applications of multivariate statistical procedures for identifying salient dimensions of defined areas and for developing equations linking area characteristics to rates of service use are described. It is concluded that applications of social area analysis methodology can make important contributions to the evaluation of health delivery systems serving catchment area populations.

173.

Syncrisis: The Dynamics of Health, II: Honduras, U.S. Department of Health, Education, and Welfare, Public Health Service, Office of International Health, Division of Planning and Evaluation, May, 1972.

A comprehensive integration of the resources that Honduras has at hand would surely help the country break out of its circular dilemma of disease-poverty-disease. Indeed, the fact that the major diseases from which the population suffers--malaria, intestinal parasitism, malnutrition, and respiratory diseases-are preventable and fall under the jurisdiction of already established government programs points to the fact that such programs deserve a higher priority and better administration.

What appears to be a chronic state of ill-health is actually an unreasonable demand made upon an inadequate public health sector. The health sector appears to be inadequate because of inadequacies of other public sectors. For example, the population of Honduras suffers from malnutrition because the high protein foods raised in Honduras are primarily exported. Enteric infections run rampant because water and sewage systems are virtually non-existent, and water supplies are contaminated by human activity. Education of the people of Honduras in health care counts for very little because very few people finish a secondary education. With only 65% of the available hospital beds in use, yet with only 1/3 of the population ever receiving any health care whatsoever, efforts at increased communication and availability should be made. In addition, direct concentration on agricultural

development, adequate water systems, education, and improved disease-eradication procedures are in order. Much of this depends upon administrative reform. These steps are designed to make better use of existing health facilities and to change the relationship between the health sector and other sectors from a negative one to a positive one, thereby reversing the present trend of a population outdistancing its means of support.

174.

Syncrisis: The Dynamics of Health III: Perspectives and Methodology, U.S. Department of Health, Education, and Welfare, Office of International Health, Division of Planning and Evaluation, June 1972.

This document discusses certain key issues involved in health sector assessments. They include the following: the epidemiologic basis of planning, diagnosis of the health status of a population, assessment of resource adequacy, inter-sectoral problem solving, a conceptual model of assessment of project impact, the costs of disease and the costs of inaction, the role of health planning in health science education, and family planning guidelines for model implementation.

175.

Syncrisis: The Dynamics of Health V: El Salvador, U.S. Department of Health, Education and Welfare, Office of International Health, Division of Planning and Evaluation, October 1972.

This document is a sector assessment of the health status of El Salvador. The framework for analysis involves geography, demography and transportation, cultural characteristics, living conditions, nutrition, population growth, major disease problems, and health care received. The conclusions of this analysis describe malnutrition as the primary health problem, unavailability of health services and lack of adequate sanitation are secondary and tertiary concerns, respectively.

176.

Syncrisis: The Dynamics of Health VI: Haiti (Revised), U.S. Department of Health, Education and Welfare, Public Health Service, Office of International Health, Division of Program Analysis.

This assessment evaluates the health sector of Haiti. The health status of the population is examined and vital statistics are provided for major disease conditions. The major communicable diseases are discussed. Conditioning factors influencing the health sector such as climate and topography, culture and history, politics, education and communication, economy, and housing and sanitation are evaluated. Nutritional status is considered one of the primary health concerns in Haiti and is addressed in this assessment as such. Agriculture is also evaluated with respect to market, administration,

production and technology. The organization of public health services in Haiti, involving financial resources, health infrastructure, health manpower, and training of personnel is assessed. National health and development planning and assistance offered by international organizations are discussed.

177.

Taylor, C.E. & Hall, M.R., Health, population, and economic development, Science, 157:651-657, 1967.

The authors maintain that health is a particularly important asset for the peoples of the developing countries. The fact that economic growth has been below that forecast and less than the population increase caused a reaction among some persons against health programmes, which they deem too effective. The authors point out the positive results accompanying the development of health programmes are real: exploitation of new land, improvement of and increase in the labour force, and changes in attitudes and behavior. On the other hand, the authors present evidence that shows a minimum health level is necessary for populations to agree to limit or space births; moreover, a minimum organization of the health services is essential for the implementation of a family planning policy. In sum, the maintenance of health activities at a relatively high level in developing countries is justified by the authors not merely on humanitarian but also on economic grounds.

178.

Taylor, Kenneth, Body and Spirit Among the Sanuma (Yanoama) of North Brazil, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

179.

Teeling-Smith, George, More Money into the Medical Sector: Is This the Answer? International Journal of Health Service, Vol. 3, No. 3, 1973.

This paper questions the conventional assumption that additional resources are the best way of improving the quality of care provided under a nation's health service. It also challenges the proposition that some diseases will always remain simply too expensive to treat. It is pointed out that the proportion of health care concerned with life and death situations is extremely small, and that the total needs related with these aspects of medical care are quite limited. Extensive evidence is quoted to the effect that in other aspects of medical treatment, dealing with chronic progressive illness and with relatively trivial disease, there is substantial misuse of resources. This arises primarily because the present patterns of morbidity and of demand for medical care have not yet been fully appreciated. In

addition, administrative inefficiency has added to the wasteful use of resources. The paper argues that it is only in the caring aspects of medicine, as opposed to its preventive and curative aspects, that the potential scope for improvement in quality of care is virtually unlimited.

180.

Theorell, T., Erhardt, L.R., Lind, E., Sjogren, A., Sawe U., Selected Psychosocial Variables in the Delay of Reaching the Coronary Care Unit, Acta Med Scand 198. 4. pp. 315-317, October, 1975.

Sixty-one first admissions to a coronary care unit have been analyzed regarding delay period from onset of chest pain to admission to the CCU in relation to psychosocial information collected from the closest relative. On the whole, psychosocial variables seemed to play a modest role in the determination of the delay period. However, one on 'type A' behavior variable, inability to relax during leisure time, was related to a shorter delay period. Young subjects tended to have a relatively short delay.

181.

Tillyard, E.M.W., The Elizabethan World Picture, New York: The MacMillan Company, 1944.

This text describes life in England and includes descriptions of medical and folk medical treatments. Included is a description of the influence of humoral medicine in the health of the English in certain periods of history.

182.

Topley, Marjorie, Chinese and Western Medicine in Hong Kong: Some social and cultural determinants of variation, interaction and change Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, Edited by Kleinman, A., Kunstadter, P., Alexander, E.R., and Gale, J., 1975.

Referenced under source in which this article occurs.

183.

Turner, D., An Udemba Doctor in Practice in Kiev A. (Ed) Magic Faith and Healing, London: Collier-Macmillan Limited, 1964.

This chapter consists mainly of an extended case study of an Udemba chimbaki. It includes a detailed description of the lifestyles and belief systems of this group of people in Rhodesia from 1950-1954. The author identifies the task of the chimbaki as remedying the ills of the corporate group while taking into account the nuances and delicate distinctions of interpersonal relationships.

184.

Tyler, David A., Resources for Development, Organizations and Publications, Action/Peace Corps. Office of Multilateral and Special Programs, Program and Training Journal Manual Series No. 3A, August, November, 1976.

This document provides an extensive list of organizations disseminating resource materials for development. Agencies are listed from the United States, Africa, Asia, Latin America and other international areas. Information provided includes address, type of organization, type of information or service provided, and a description of the activities in which the agencies are engaged. A separate section lists useful publications with a brief description of foci relevant to developing areas.

185.

United Nations Conference on the Human Environment, Stockholm, 1972, Subject Area IV.

This Conference report discusses the need for action in treating environmental problems that affect human well-being. This includes a discussion of the social and cultural dimensions of environmental problems; social and cultural roots of the crisis; incentives for action. This report also presents objectives of action, means of taking action and recommendations for action. The recommendations include: continuous social diagnosis; educational action; public information and participation; conservation and creation and exchange of information.

186.

Van Etten, G., Towards Research on Health Development in Tanzania, Social Science and Medicine, Vol. 6, pp. 335-352, 1972.

The aim of this article is to suggest new ways of medical sociological research in particular in relation to modern institutions providing medical care and training facilities. An attempt has been made to describe the characteristics of socio-medical research in the past. It is argued that traditionally most research in this field in Africa was concerned with subjects like the system of traditional medicine in the various ethnic groups and cultural and social factors related to health and disease. This article discusses the need to investigate the modern medical treatment units, the training centers and the medical profession in order to be able to assess whether the pattern of medical care and the training system is well-adapted to the political and social requirements of the country.

187.

Weidman, Hazel Hitson, A Behavioral Science Perspective in the Comparative Approach to the Delivery of Health Care, Social Science and Medicine, Vol. 7, pp. 845-860, 1973.

This paper, written from a national point of view (that of the United States) has international applicability. It focuses upon problems in the delivery of health care. By suggesting a behavioral science approach to such matters, it offers a better means of raising health levels than other discipline-bound efforts to date. The paper is divided into six parts. Part one addresses itself to the importance of a behavioral science perspective by critiquing several key references which bear directly on the health services system. Part two guides the reader to the available anthropological and sociological literature on health behavior. It comments on the inadequacy of each. Part three provides a description of the comparative approach to health behavior and suggests the extent to which methodological refinements have b-en made in recent years. Part four discusses the application of the comparative approach to the delivery of health care issue. Part five stresses the magnitude of the need for a behavioral science perspective requiring simultaneous attention to multiple disciplinary dimensions. Part six refers to the behavioral science perspective in specific program settings in the United States, suggesting that this approach will assume an indispensable role in the national effort of evaluation of the health care system.

188.

Weisbrod, B.A., Andreano, K.L., Baldwin, R.E., Epstein, E.H., Kellog, A.C., Disease and Economic Development, Madison, The University of Wieconsin Press, 1973.

This is a report of a study of the economic and health impacts of schistosomiasis and various control methodologies in St. Lucia island. The report elaborates the problem of quantifying the effects of disease control technologies in developing countreis. This is a useful case study to understanding the complexities of the decision-making process regarding disease control/prevention technologies.

189.

Wellin, E., Water boiling in a Peruvian town, in Health Culture and Community, B. Paul (Ed), New York: Russell Sage Foundation, 1955.

This chapter in Paul's classic text falls in the category of "re-educating the community." It provides an account of which peasants decided to follow the recommendations of the Ica Department Health Service and those who did not. The cases are reported anecdotally with inferences as to why the women chose to boil or not.

190.

Wionczek, Miguel S., "Science and technology strategy for L.D.C.'s Science, Vol. 196, (4292) May, 1977

The author discusses problems associated with existing strategies for scientific and technological development of "less developed

countries" (LDC's). He suggests that advanced countries consider the implementation of advanced technologies and establishment of modern scientific institutions as a solution to development problems while spokesmen for the developing world often view science and technology for development as a panacea for all hindrances to progress. It is proposed that a primary concern in these countries should be a build-up of internal scientific and technological capacity, the advancement of which will depend more on establishing permanent and strong links between the research and development system, education, and the economy. At the same time less emphasis might be placed on imported technologies that tend to "perpetuate themselves in a context of general technological backwardness."

191.

Wolf, E.R., San Jose: subculture of a traditional coffee municipality in The People of Puerto Rico, J. Steward (Ed) Urbana: University of Illinois Press, 1956.

Source unavailable for reference.

192.

Woods, Clyde, M., and Graves, Theodore D., The Process of Medical Change in a Highland Guatemalan Town, Medical Anthropology, Grollig, Francis and Haley, Harold, Paris: Mouton Publishers, 1976.

Referenced under source in which this article occurs.

193.

World Health Organization, The economics of health and disease, WHO Chronicle 25, 20-24, 1971.

This article summarizes the main findings of a seminar on health economics organized by WHO in Moscow in June-July, 1968. The seminar discussed the role of health economics when confronted with increasing health expenses, especially in determining how best to use resources. Health economics has an essential task in relation to the management of the "health industry" and the effectiveness of health services. The article briefly discusses the individual, social and cultural benefits that are difficult to identify and to assess. It does stress the importance of these variables, as difficult as it is to quantify them, in cost and benefits analyses.

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