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TRADITIONAL MEDICINE
AND
INDIGENOUS PRACTITIONERS

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TRADITIONAL MEDICINE AND INDIGENOUS PRACTITIONERS

I. INTRODUCTION

Often overlooked in highly industrialized societies is the very significant fact that traditional or non-industrial societies contain within themselves the resources to meet virtually all of their felt needs. When they can no longer do so they are threatened with extinction or dispersal. Among the basic needs are those relative to health and physical and mental well-being. There is not a group of people in the world which does not have access to some kind of health services. They range from simple home remedies for minor illnesses, through psychiatric therapy to major surgical repairs. Furthermore, until very recently most societies perceived their own body of medicine or health practices to be adequate, effective, and immutable.

Efforts to introduce European medical services into non-European societies began with the first travellers to reach the remote ancient world from Europe. The Jesuits introduced empirical European notions of anatomy in China in the 17th century but could not change the Chinese classical view of anatomy based on intuition and the occult (Crozier). Nineteenth century trade and colonization brought western medicine to most parts of the world. Services were provided by colonial governments to protect their employees. Missionaries provided services in some areas, and efforts were made to limit epidemics by the use of prophylaxis and sanitation. Some western contributions to medicine have been incorporated in the folk systems of many groups of the world, and very often the disease is identified with its cure. That is, some

people classify diseases as their own or as "European". If the former, their own practitioners alone can cure them. If "European" then modern medicine is necessary.

However, despite this recognition of different categories of disease and the concomitant recognition of difference in the type of doctor or medicine, it cannot be overemphasized that in the non-industrial world, all facets of life are woven together with every other facet. There are few neatly compartmentalized phenomena in everyday life. That is to say, the economic, legal, religious, social, artistic, medical and dietary activities are related to each other, much in the same way that European institutions and disciplines had their roots in the medieval church and the monasteries. Nearly every act is somehow connected with one's cosmic view. It is not so much that religion or the supernatural pervades everyday life, but that even the most mundane activity is associated with symbolism or ritual - bathing, dressing, food preparation, etc. Few activities are strictly secular. Most societies feel bound to the land on which they live or across which they habitually travel. They are related to the spirits of the place, perhaps to the ancestral burial ground or to the rocks or the streams, or to the gods who dwell just beyond the village, in the hills or in the lake. Furthermore, the individual in traditional societies is not autonomous. He does not know how to think of himself without his group identity.

Against such interrelatedness, then, one must pose concepts of health and disease. Health is the well-functioning relationship of the parts, including individuals, to other individuals of the group,

to the spirits, and to the environment. Disease is created when such relationships get out of kilter. It is the task of the curer to restore the balance. Therefore, whereas modern societies accept microbes as the cause of infectious disease, it is nothing so simple to the vast majority of earth's occupants. Germs can be seen through a microscope, and they can be demonstrated to be the source of man's illness. However, traditional man will insist that there is a supernatural element at work to cause those germs to attack him specifically. In the modern world, life has become highly specialized or compartmentalized. Direct manipulation of body and environment is taken for granted, and modern man stands back in mute surprise and sometimes anger when he meets with the fatalism, acceptance, and "stubborn" resistance to "change for the better". The average traditional man is pragmatic and perceptive. He may be uneducated, but he is rarely stupid. His way of life has worked for thousands of years for him and his family and along with everyone else in the world he is sensitive to criticism of his own society. Whether the condescending, but well-meaning, individual attempting to coerce him is a local secondary school graduate medical auxiliary or a foreign technician, it makes little difference. When the technician and graduate get positive results from innovative efforts, sometimes they will be listened to. Too often, the reasonable man has listened and has recognized the virtue of certain improved methods or ideologies only to find that promises have not been fulfilled or that such improvement has created problems elsewhere. In Pakistan a health survey was conducted by examining a group of rural male volunteers. After some time in the same area more volunteers

would not come forward, and it was learned that complaints were circulating that those volunteers who were told that they were ill were not provided curative services. This group felt that they were better off not knowing they were ill if such knowledge availed them of nothing but concern (Inayatullah). The logic of this particular complaint does not require any cross cultural interpretation, but it gives insight into village perceptions of innovation.

Despite the foregoing, however, it is becoming apparent that most societies are changing rapidly and that population pressure, rising levels of expectation, and manipulation of the processes of natural selection have created massive and insidious health problems which will not be easily mitigated by traditional medical practices. Infant mortality is high in most of the developing world, but it is declining thanks to some access to modern medical services. However, due to population pressure and changing food habits caused by changes in agricultural practices, infant and child feeding practices have deteriorated and the implications for future intellectual growth give cause for alarm.

A major consideration, though not stressed in the report, is the strategic and positive role often played by the practitioner, shaman, witch doctor or medicine man, in providing supportive service during periods of rapid social change. His services are especially valuable when change is occurring more rapidly in more places than ever before. History is replete with instances of social breakdown, alienation, sharp increases in antisocial behavior, and every other social ill

attendant upon rapid transition including a malignant outbreak of witchcraft accusations in 17th century England (Keith Thomas). When the paternalistic manorial estate system gave way to one of open peasant farming, and the Catholic Church and its services for exorcism were withdrawn, the number of witchcraft cases (handled by that time in the courts of law) increased remarkably and then declined in the 18th century, marking the beginning and the end of drastic socio-economic upheaval and reorganization. The increase of witchcraft cases in Uganda, the Congo, and elsewhere recently has been documented. In each instance it was related to the withdrawal of the colonial administrations and readjustment over a relative short period of time. In each instance it has been the witch doctor, priest, or, in our own society, the psychiatrist, who provides supportive services until new institutions and perceptions are integrated into a well-functioning socio-cultural unit.

When members of one culture try to manipulate other cultures and fail, or find that their carefully made plans have gone awry, it is often because they are seeing problems where the people themselves see none. In addition, perhaps attempts are made to solve the non-existent problems with plans and practices developed in another culture. Thus, the African did not think yaws was an illness; people in Mississippi years ago remarked, when told that a certain person was ill, "Oh, he isn't sick, he has malaria" (Ackerknecht). The English can cure most minor ailments with a cup of tea, and only Frenchmen get "crise de foie".

This report is a review and analysis of some folk medicine practices and the role and potential of indigenous practitioners. It

is hoped that such an analysis will provide some insights into current indigenous practices which could lead to a better understanding of needs and perceptions in health services in areas where high-cost scientific medicine is economically impossible and unrealistic.

II. TYPES OF MEDICAL SYSTEMS FOUND THROUGHOUT THE WORLD

In addition to modern scientific medicine, there are several other medical systems operating in the world today. The classical medicines of the world were and are complex systems containing articulated theories of bodily processes, diagnoses of the causes of malfunction of these processes, and therapy designed to correct such malfunction. The classical Indian (Ayurvedic), Chinese, Arabic, Greek, through processes of diffusion, culture contact, and unilineal development share many similar concepts.

In each, disease is believed to be caused by an imbalance or by the absence of harmony between the individual and his surroundings, or between various parts of the body, or between the physical and spiritual components of the individual. The harmony and balance were maintained, especially in Ayurvedic and Unani medicine (the Muslim system of "Greek" medicine) by dietary laws, proper sexual practices, and by proper rest and proper activity or exercise. Ayurvedic medicine is based on the concept of the "tri doshas" or three humors within the body which can be affected by any of the three factors above. In Unani medicine the four humors of Hippocrates and their relationship are the basis for all ills. In Chinese classical medicine the five elements of the universe - fire, water, earth, metal, and wood -- were related to five basic organs and functions of the body. A malfunctioning of this delicate and complex

relationship causes disease. Health can be restored by manipulating the elements and the organs in their relationship to each other. Whether it be three "doshas", four humors, or five elements, the main point for the purposes of this paper is that each of the systems of medicine conceives of man as a part of a larger universe, intimately related to that universe, and affected by change in the cosmos or in himself which upset the web of relationships. Ayurvedic and Unani developed theories based on Hippocratic theories of disease as "hot", "cold", "moist" and "dry". These characteristics were also inherent in food, drink, and herbs. Too much of either one or two working in tandem (usually hot-dry or cold-moist) is unhealthy and the remedy is the application of food and medicine of the opposite characteristic to restore health. The classification of a food, drink or herb has little, if anything to do with its temperature. These classifications determine its appropriateness for consumption at certain times of the year, under certain conditions of health and during certain ritual performances. The current classification of hot or cold has been found to be inconsistent throughout many parts of India (Neumann, et al), but consistent throughout Pakistan (Zeitlin). One of the more interesting phenomena in the history of medicine is the prevalence of hot-cold concepts in Latin America. The Spanish transmitted them from 16th century Europe where they had been preserved in Arabic medicine which borrowed them from the Greeks. The classifications do not necessarily resemble the Indian and Pakistani classifications. And the stress of "cold" being more unhealthy than "hot" is the reverse in Pakistan where "hot" is particularly bad.

Attached to these medical theories are, of course, diagnostic and curative practices. In each case the cure is structured to "restore the balance" or the harmony. After diagnosis, treatment consists of herbs, charms, incantations and, of course, proscriptions. Medicine was attached to the religious and spiritual centers. Therefore, cures were effected through a body of empirical knowledge consisting of herbs and dietary regulations in conjunction with mystical practices relating to the structure of the anatomy and supernatural powers.

The history of Inca medicine, some vestiges of which remain in practice, is recorded mostly in the physical artifacts which archaeology unearthed. These include ceramic vases or jugs decorated with human figures manifesting various physical anomalies such as tumors and rashes, or childbirth procedures, etc. Human skulls have also been found with trepanning holes, and evidence of new bone formation around them indicating that the patient survived. A system of poultices, massage and herbs is operative today, and believed to have been handed down in continuous usage from the Incas to present day Andean and Amazonian Indians.

The medicine of Sub-Saharan Africa despite the vast geographic area, is amazingly consistent in perceptions of health, disease and therapy. Again, the central idea is the interrelatedness of all human beings, their activities, and their universe. Efforts are presently being made to record in a systematic way the traditional medical practices in some part of Africa. However, such information has usually been incorporated in anthropological monographs. There are a variety of beliefs and practices but they are usually centered around the same

theme: Disease is caused by supernatural activity.

The social status of practitioners of traditional medicine has varied from time to time and place to place. In classical China the status of physician underwent several fluctuations. At one time they were highly regarded men of learning and wisdom. At another well-meaning but ineffectual dilettantes. In Pakistan the social status of the hakim is perhaps little more than that of an artisan or at best a technician depending upon the extent and type of training. In India where priests were Brahmans by definition, and the original physicians were priests, vaids have perhaps a higher caste status today than most caste Hindus.

The dai (midwife) in Pakistan has low status, but the same occupation in southeast Asia imparts some prestige to its practitioners.

Curanderos in Latin America, mostly older, trustworthy women, are respected, while in Africa diviners (as opposed to shaman priests) are often social deviants.

This once-over-lightly review of traditional and classical systems of medicine serves to emphasize that, although in the light of modern knowledge they are outmoded and archaic, they are still intertwined with the culture, history and beliefs entrenched in India, Pakistan, Latin America, China, southeast Asia and Africa. One cannot begin to understand the difficulties of planning and implementing modern health services until one has tried to view the world through the various cosmological filters. Furthermore, these systems have worked and until something better comes along will continue to operate.

III. MEDICINE IN AFRICA

Throughout Africa there are a great many varieties of beliefs, practitioners and practices related to health and disease, physical and mental. Despite this variety, however, Dr. T.A. Lambo, the noted Nigerian psychiatrist, refers to a common mental construct or mode found throughout Sub-Saharan Africa which affects African thought, perceptions and behavior, which constitutes part of the African personality. Lambo writes "It is important to remember that the fundamental basis of African cultures attributes all values, categories of thought, and significant content of thought to the group...he does not interpret reality in relation to the temporal environment but in terms of the relations of men to other men and of men to the supernatural", (Lambo-1). His thoughts and behavior are formed by "emotional associations" based in "affective awareness of other human beings." The idea of dependence upon interrelationships permeates the life of the African and also affects his perceptions of health and disease. Again, as in most classical theories of medicine, if ill health occurs it means that some relationship is not operating properly. Automatically and without realizing it, the African does not think or act without taking into consideration the implications of his behavior in his relationships with relatives, his village, his tribe, his ancestors or the pantheon of gods. This means that his relatives, his village, his tribe, his ancestors, and the gods are involved in illness, diagnosis, and cure. Therefore, the idea of the lone patient with a one-to-one relationship with a physician is alien to most Africans. Even if he were to agree to diagnosis, the

patient would find it impossible that a cure could be affected without considering the whole web of traditional relationship within which he resides - social, institutional and supernatural.

Contrary to the popular image of one medicine man who treats all ills, there are many types of illnesses recognized by the African and many types of treatment. The patient often knows the appropriate treatment and the appropriate practitioner. Traditional African curers include herbalists, bone setters, surgeons, midwives, diviners (diagnosticians) and witch doctors (exorcists). The latter is a curer and not a witch. That is, he has the supernatural power to ameliorate or repair malfunctioning relationships, but as a rule he does not use this power for evil against other human beings. Witch doctors or shamans can be men or women and are usually called upon when other remedies have failed.

Surgical operations have included circumcisions (male and female), repair or major injuries suffered in warfare or hunting accidents, and successful cesarean sections. Often one individual is able to offer more than one type of service, and in most societies there is a consultation and referral relationship between many of the practitioners. A herbalist might use magical incantations and symbolic items in addition to his herbs and, therefore, qualify as a witch doctor. A diviner might be a diagnostician only, or the witch doctor might be able to divine the cause and cure of the illness as well as provide the therapy. Sometimes these specialists are members of the tribe and at other times they are called in from another group.

A. Beliefs

Hans Cory describes the medical attitudes and practices of the Basukuma of Tanzania. The Basukuma are a migrant people who have for years worked as porters and as railway laborers. Despite their contact with Europeans and urban ways they have maintained their own beliefs with regard to medicine. Cory says, "Magic is usually connected with medicines; in nearly every magical rite there is need of a medicine endowed with magical power". Basukuma medicine as a rule consists of two ingredients: the roots or other parts of a tree and a supernatural element called shingira. The physical part of the medicine, i.e., the tree, is chosen to match the personality of the person (often a bird is chosen to represent a child). Incantation is an essential part of the cure.

Cory organizes Basukuma medicine into four types: (1) Protective medicine: those rituals and acts which ward off evil; (2) Assertive medicine: rituals and acts which petition for favors or cures, and the preparation of certain herbs; (3) Creative medicine: rituals relating to fertility among humans, animals or fields; and (4) Aggressive medicine: ritual or medicine designed to cause misfortune to befall an enemy.

Among the Basukuma it is difficult again to pinpoint services that are exclusively medical because life is permeated with magic relationships with fields and animals, with enemies, friends and relatives and the supernatural. Herbs and incantations help people fall in love, kill enemies, cure physical illness, and ward off misfortune.

Cory writes that "...the African is in an ambiguous state of mind

as a result of his daily experience of rational connections between cause and effect on the one hand and his daily experience of inexplicable accidents on the other, and thus strong belief and strong disbelief in magic alternate. If a magical medicine fails, Africans are often ready to express their disbelief in a very definite manner, but very soon an incident takes place for which they can find no explanation except that some magic power has been at work. Consequently, the belief in magic takes root again." Cory goes on to say that "A magician is usually the most superstitious man in his village and uses part of his income for the acquisition of stronger medicines from other magicians". Many practitioners help each other out, but there is an element of strong competition. On the other hand, they do not criticize their colleagues in front of others because such criticism would discredit oneself.

Among the Basukuma "The belief in magic is so natural both to the people and to the practitioners that many principles of magic medicine are transferred to, and combined with, the treatment of real diseases which is otherwise based on knowledge of anatomy and the symptoms of disease and on pharmacology. Hence, very frequently a medicine containing therapeutic ingredients also includes shingira or even a symbolic representation of the sick person or of the disease".

G.W. Gale in 1934 wrote that the Zulu of South Africa recognize that some illnesses "just happen" and are not necessarily caused by evil spirits. Mild ailments are treated by home remedies. However, should the disease persist it is necessary to call in a diviner. Among the

Zulu, according to Gale, "Dominant is the belief that any disease may be, and that all serious diseases actually are, caused by occult agents. Second is [the Zulu's] faith in his medical man, not as the product of a training in any special school or system of medicine, but as one who has been endowed by nature with special gifts of discernment and of healing" (Gale).

The beliefs among the Jerawa of the Benue plateau of Nigeria include spirit cults, ancestor spirits, sorcerers and witches which are responsible for illness and misfortune -- except for old age, sleeping sickness and venereal disease. (The status of sleeping sickness and venereal disease has changed over the years because of contact with modern medicine and its effectiveness in controlling them when all other methods have failed). Cause of illness is divined often by the patient himself in dreams. If not self-evident, he may then seek a diviner of which there are many in the area, some of them women.

Directly connected with the ancestor cult among peoples of the Benue region is the high value placed on children for it is they who will appease one's spirit after death.

In reviewing Mashona medical practices in Rhodesia, Michael Gelfand analyzes their attitudes toward the spirits of their ancestors who are ambivalently thought to be protective and at the same time to be able to stir up trouble. Medicine can also work for good or evil at a long distance. The Mashona believe that if a malevolent individual gets hold of a man's nails or hair clippings, excreta, or a fragment of clothing he can use these to induce misfortune. "His soul is in this material". Spirits may be alien spirits or aggrieved spirits.

The latter are the more dangerous (Gelfand).

A valuable source of information about African medicine is the book written by Dr. G. W. Harley in 1941 about the Mano tribe of Liberia. He discusses the practice of ancestor worship. Among the Mano ancestors rarely bring bad luck or misfortune or disease. They may pray to ancestors for protection but do not appeal to them for disease cure. In this study he describes trial by poison ordeal of an accused witch. When a witch has been "smelled out" by a diviner and has refused to lift the spell, he or she is brought to trial and forced to swallow great quantities of a toxic infusion made with sassa-wood (the Mano term translates as "red water"). Whether he vomits or excretes the liquid in enough quantity to survive has a bearing on his guilt or innocence. If he does it is proof that he is guilty and by dying he also lifts the spell.

The belief in witchcraft and its strong association with medical practices in Africa cannot be overemphasized. Witchcraft is terrifying to some tribes and witchcraft accusations are not taken lightly. The whole bundle of destructive human feelings including envy, hatred, jealousy and malice are involved, and witchcraft is often blamed for the breakdown in some social relationships. It also acts as a means of social control and provides a means of dealing with destructive behavior.

The power of the belief in witchcraft to destroy individuals is universally known. For years the man who died from an evil spell in the absence of other symptoms has bewildered doctors working in Africa. However, there is a concomitant faith in the witch doctor or healer to make medicine stronger than that of the enemy. There are also

methods of bringing to justice witches and dealing with them to prevent the destruction of the group by the supernatural powers of an individual.

There is an apparent difference in attitude from tribe to tribe, with regard to witchcraft. Among the Mano of Liberia where an accused witch is tried by poison ordeal to determine guilt or innocence, such an accusation would not be taken lightly (Harley). On the other hand, Evans-Pritchard says in his classic work on the Azande (singular: Zande) of the upper Nile that they view witchcraft with a degree of equanimity.

The Azande have lived traditionally in an environment of beliefs with regard to the spiritual world which they take for granted. Within this framework of faith through conditioning and expediency they are able to satisfy physical and psychic needs. They live daily with the accepted notion of witchcraft, oracles, and magic. Although they recognize natural as well as supernatural causes and effects, they rarely make a distinction between them because they constantly interact.

There is little hysteria with regard to the workings of the supernatural. In fact, the institutional processes by which the Azande resolve their conflicts and maintain social integration are mainly appeals to the supernatural. Witchcraft is a negative phenomenon associated with misfortune. No one likes to be on the receiving end of witchcraft, and almost every man accused of witchcraft is astounded at the idea. However, witchcraft exists and is accepted. According to Evans-Pritchard, "Witchcraft is ubiquitous. It plays its part in every activity of Zande life; in agriculture, fishing, and hunting

pursuits; in domestic life of homesteads as well as in communal life of district and court; it is an important theme of mental life in which it forms the background of a vast panorama of oracles and magic; its influence is plainly stamped on laws and morals, etiquette and religion; it is prominent in technology and language; there is no niche or corner of Zande culture into which it does not twist itself."

If misfortune falls upon an individual to a greater or lesser degree he will attribute his misfortune to witchcraft and attempt to discern who might be trying to cause him trouble. Some of the causes may appear natural and obvious, but when everyday routine is disrupted the combination of events which lead to misfortune is attributed to witchcraft. If the roof of a granary falls down injuring or killing some people sitting under it witchcraft is involved with the fact that there were people sitting under the roof at that time. That the supports were eaten away by termites is understood to have weakened the structure. If no one had been sitting under it perhaps there would be no witchcraft. However, there were and thus witchcraft must be the answer. Witchcraft is the coincidence.

Witchcraft is also relative. The "I and you" or "me and the other person" relationship comes into the picture. If a man is upright, highly regarded in the community, and a good citizen he will have fewer instances of mishap than those who are misfortune prone. In other words, a man may attribute his bad luck to an attempt on someone else's part to cause him misfortune, but his neighbors may say he was stupid. Or perhaps he breached a taboo and therefore brought it on

himself. So witchcraft may be in the mind of the bewitched only. And to take it one step farther, the man who is stupid and misfortune-prone is also considered to be a likely candidate for witchdom.

Therefore those who fit into the society and abide by their obligations and are good members of society are less likely to be accused of witchcraft. When misfortune strikes, the good citizen is more likely to be supported in his accusation of witchcraft. Therefore to the Azande witchcraft operates in a framework of individual merit. In other words, there are empirical reasons why witchcraft operates as it does.

Breaches of the legal code are recognized as such. "Murder is murder." "Witchcraft does not cause people to lie." A malefactor may say he was bewitched but this is often taken as an excuse for his own weakness. "Zande accepts mystical explanation of misfortune, but does not allow it if it conflicts with social exigencies expressed in law and morals."

The ability to bewitch or the attribution of witchcraft is said to be inherited from father to son and from mother to daughter. The physical evidence of possession of witchcraft powers is found in the intestines upon autopsy. If a man is accused he may prove that the accusation is false because there were witnesses at an autopsy of his son or other near kinsmen and the "soul" of witchcraft was not found.

Or if a man is accused of witchcraft he may blow water from his mouth on to the chicken wing conveyed to him by the messenger sent to accuse him. This spraying of water is supposed to undo what his witchcraft has done. Often the accused sprays water despite the fact that

he denies the accusation -- seemingly an illogical sequence. However, upon investigation it turns out that the accused takes the easy way out. In the interest of avoiding an encounter he will do what he can to undo what he claims he did not do in the first place. To quote again from Evans-Pritchard, "A Zande in any given situation will select from [traditional doctrines] what is most advantageous for himself at that moment and exclude the rest." This behavior of not wishing to cause an encounter also ties in with the description of the Azande as pleasant, adaptable, active and friendly.

The approach to oracles, magic and witchcraft is a pragmatic one. Witchcraft trials and predictions of future events are performed by the poison oracle who forces chickens to swallow poison. Apparently, though the Azande recognizes the efficacy of poison, it is in the end the supernatural power which determines whether the chickens live or die. The ideal outcome is one dead and one live. The dosage and the condition of the chicken have little to do with it. When poison plants are collected they are empirically tested for effectiveness. If all the test chickens die, the poison will not do, and if they all live it will not do. They must find the plant which will kill some and leave others alive. Only then under ideal neutral conditions, can the supernatural operate.

The supernatural is rarely challenged beyond its limits. There is no use asking for rain in the dry season. However, if the rains are late one might appeal to the supernatural for help. If the appeal fails it may be because the supernatural is out of sorts or weary or

tired of repeated requests for the same thing.

The poison oracle does fail sometimes but the failure is blamed on interference by other mystical forces. If mystical powers are excluded it is known the oracle is infallible. Or further, the failure of the poison oracle can be blamed on witchcraft.

In a functional sense the various witchdoctors and oracles act as a system akin to courts. One approaches a minor oracle for preliminary data or to clear up minor misunderstandings "out of court" as it were. If the parties are not satisfied then appeal is made to the poison oracle who is backed by royalty. His word is final.

In western society problems of social conflict at a low level are handled by avoidance of the parties involved or even ostracism. If a man cannot fit into his social group, he can leave for another area or at least avoid his adversary. In small isolated communities exile means loss of identity and is considered drastic. Therefore everyone must live in a relatively compact area and must come into contact with those he dislikes. Conflict is bound to arise and for community solidarity there must be recourse to mediation which will be accepted by all. As we have seen, there are logical methods of handling conflict and when decisions are handed down it would be folly to dispute them.

Therefore it is safe to say that in the Azande world they can explain most phenomenon logically. First at the practical level by empirical evidence and experiment and then by attributing much to the Almighty. Evans-Pritchard says that their "experimental keenness...

is conditioned by ritual behavior and mystical belief." If it were not so they would find themselves on the horns of the universal teleological dilemma. If they could conceive of themselves being without their mystical beliefs they would probably say with Camus that their entire existence is meaningless and absurd.

The function of witchcraft may be socially divisive, but the role of the witchdoctor is cohesive. This extends into the field of medicine in Africa and in many other parts of the world today. The classic analysis of witchcraft by Evans-Pritchard can serve as a model to help us understand what is happening in Africa today, some fifty years later. Most of Africa is in a state of rapid transition but beliefs about witchcraft have not changed drastically as contemporary studies have shown.

A.T. Lambo writes: "In our clinical research among a sample of Nigerian students who broke down mentally during their courses of study in Great Britain between 1957-1958, we discovered inter alia, that the symptoms of over 90% of the patients showed clear-cut evidence of African traditional beliefs in bewitchment and the supernatural" (Lambo-2).

In a survey in Ghana among 40 college students it was found that on the average the students thought 85% of the people "within their range of contact...believed in spirits, juju, witchcraft" (Weinberg). Such beliefs have a direct bearing on attitudes toward medical services.

Una Maclean's analysis of medical beliefs among the Yoruba today includes many characteristics similar to those observed among

the Basukuma, the Mashona, the Zulu, the Azande, the Mano, the Bunyoro, the Masai, and in fact every group in this review from east to west and from north to south of sub-Saharan Africa. The Yoruba has strong beliefs attached to ancestor cults. He has a pantheon of gods that assure his well-being if they are content, but who will bring disaster if they are roused to fury. Included among them is Shapona - the god of smallpox; Okun - the great god of good; Eshu Elegba - the trickster god; and Shango - the god of thunder. If an ancestor or one of the gods is discontented, evil and misfortune will occur. Interwoven with beliefs in supernatural beings is a strong belief in witchcraft or the supernatural power of humans either to work spells through "medicine" or through innate gifts. Again, witchcraft is recognized as the coincidental factor in any particular misfortune. It "... must be recognized as one of the prime causes for disease and personal disaster which, together with the anger of ancestors and the whims of the capricious gods, compromise the central features of Yoruba medical philosophy " (Maclean).

Having said all this, however, Maclean reassures us that the efficacy of modern medicine is also recognized among the Yoruba. Modern breakthroughs are not unknown in Africa. "In the treatment of acute conditions, severe and sudden infection, surgical emergencies, obstetrical complications, dangerous childhood disease, western medicine is conspicuously superior"(Maclean). "Wherever western medicine has reached, people have been quick to recognize its advantages in these fields and to desire for themselves and their families the benefits of

such treatment" (Maclean). However, the gap in perception between western medical concepts and Yoruba concepts is that between the "necessary and sufficient" cause of disease in the west and the "why" of the Yoruba. The "why" is tied to personal and cosmic relations. She used the example of the man who contracted food poisoning and even though the doctor of scientific medicine was able to explain to him what happened, the man remembered that the last place he had eaten was at his brother's house. Because he and his sister-in-law were at odds with each other, she must have poisoned the food she gave him. The idea of naturally contaminated food and no deliberate act on the part of the sister-in-law was beyond his comprehension. The coincidence was too great.

Among the Yoruba the earth is important and not the sun, moon and stars. There is a strong sense of community between the living, the dead, and the gods. Therefore, explanations for dysfunctions vary and may be caused by the power of the gods, fate, or malevolent humans. But, to be sure, one of them is involved in every misfortune.

Maclean describes the deeply rooted need of all Yoruba women to bear children and the heavy burden of shame and inadequacy which is associated with barrenness. "...this is an area in which a woman's personal hopes and fears are so deeply involved that she is likely to draw more reassurance from familiar advisors and from supplicating the gods than from the paraphernalia of a gynaecological clinic." (One wonders whether she really is that different from her European sisters in this regard.)

An additional belief affecting medical practices in Nigeria is the abiku phenomenon. The death of a child with siblings is one thing, but repeated deaths of infants one after the other born to the same woman means that the same child is born again and again and is doomed from the start. Such a child is called abiku or "born to die". One way the family attempts to break the chain is to dress the child unbecomingly and denigrate it verbally so that its spirit playmates do not want it back in the other world (Morton-Williams). The faith in modern medicine to save these children would be minimal since their fate is in the hands of the gods.

Among the Digo tribe Kwashiorkor, rickets and general debilitation among children is thought to be caused by parental sexual transgressions. The Digo do not believe that modern medicine can cure the children.

3. Practitioners

Among the Zulu the diviner is clairvoyant and can communicate with the ancestors. These diviners are characterized by Gale as often neurotic. Behavioral peculiarities are associated with diviners in many societies. Their means of communication is by means of self-induced trance or epileptic seizure. Diviners can also be used to learn the location of a strayed animal or a lost article. If it is determined that the misfortune is caused by unhappy ancestors, then the remedy might be the ritual slaughter of an animal and/or ceremonies and prayers. If, however, the misfortune or illness is caused by sorcery then it is necessary to engage the witchdoctor to "smell out"

and deal with the sorcerer. Gale makes the point that among the Zulu witch doctors suppress witchcraft. They do not originate it. However, the witch doctor's position is not altogether clear, because he can be persuaded to make false accusations against unpopular people.

Among the Zulu the herbalist is a "proper medicine man" and distinct from the diviner or the witch doctor. He is trained by another herbalist in the preparation of roots, leaves, and bark decoctions and in diagnosis for their proper use. He knows no physiology or pathology. His knowledge of anatomy is slight. He is paid when he has worked a successful cure. "His fee varies with his own reputation, the nature of the illness and the standing of the patient." A retainer is paid 10 to 25 shillings at the outset (in 1934). If he is successful his final fee will be paid in cattle. If he is unsuccessful there will be no further payment.

The function of magician and doctor among the Basukumba are combined in one man, the mufumu, and this profession was at one time inherited. In 1949 healers were learning their profession by apprenticing themselves to practicing medicine men. In some instances there is secrecy surrounding the learning of magic, but the knowledge of herbs is learned over a long period of time. And according to Cory there is no formal initiation into magicianhood. He discusses the African belief that witchcraft can cause death, and also faith in the anti-witchcraft powers of the mufumu. There is also a connection between the belief in witchcraft as cause of ill health and a bad conscience (Cory).

Among the Jerawa of the Benue Plateau area of Northern Nigeria "specialists in medical practice are the only full-time craftsmen apart from smiths who deal with anything from tooth extraction to witchcraft, including abortions" (Gunn). In one small town in the area there were a number of circumcisers, "two dentists (one a woman), three 'leprologists', at least one gynaecologist and one man who specializes in children's diarrhoea, besides many others" (Gunn). Among the non-Hausa tribes, as among the Hausa, Hausa doctors and Hausa charms are valued. Most therapy or treatment involves magico-religious ritual and charms in addition to herbal or manipulative treatment. If it is known that a discontented ancestor is the cause of illness, a horse may be ritually slaughtered and eaten and the ancestor's bones exhumed and reburied (Gunn).

Some rituals involve the use of sasswood, sometimes used in connection with poison ordeals. The keeper of this sasswood in the Benue area is the Buji chief. The Buji tribe specializes in ritual and performs for neighboring tribes. For ritual circumcision of Chara men, the village calls in the Buji clan. When the Chara people were asked why they called in the Buji, they said "because they make good drums". This recognition of outsiders, in this case Hausa and Buji, as curers, healers or ritual specialists is common. The group or individual is recognized as effective, even though he is technically an alien. Such reciprocal agreements are usually part of a greater and more complex relationship based on economic and/or political reciprocity. Goods and services exchanged in a dependency relationship

which is structured and the origins of which are often lost in the past. The important fact is that such curers have a reputation of competence, no doubt based on experience, empirical observation, and familiarity with client expectations.

Among the Yoruba there are at least two specialists in the medical field. The onishegun is primarily an herbalist, and the babalawo is a priest of the Ifa cult. He is a diviner, sometimes an herbalist, and most importantly, a psychotherapist. The onishegun is less highly regarded than the babalawo. The herbalists are by and large a group of elderly men. Maclean's survey among 5,790 inhabitants in Ibadan disclosed 12 traditional healers at work. From this she extrapolated an estimate of over 900 for the whole town of 479,000 inhabitants (1969-1970?). A very small percent were under 40 years of age, 42% were over 60 and several were very old. Herbalist training is by apprenticeship which can last from 3 to 20 years with an average of 10. It is a hereditary occupation and often the herbalist comes from outside the community in which he is practicing. His techniques for diagnosis and cure are a mixture of ascertaining the "social" facts (what might be considered irrelevant in western medicine), ritual and herbs.

If a herbalist determines that he cannot effectively treat certain psychological conditions he may refer the patient to an Aladura priest (as in Ghana) or to the highly regarded babalawo. However, in Abeokuta another large Yoruba town not too far from Ibadan, there is a western style mental hospital, and the herbalists sometimes refer

patients there. The babalawos, as in Ghana, are finding their profession undermined by the government mental hospital and by the Christian faith healers. Nevertheless, the effectiveness of the babalawo is recognized to such an extent that his services are in use at the modern government sponsored mental hospital at Abeokuta (Leighton, Lambo et al).

The Mashona have several practitioners who are called in to remedy misfortune and ill health. Following the usual African pattern they first determine the cause of the misfortune through a medium or diviner who is also the healer. This person is called a nganga and can be a man or woman. His function is to "eradicate witchcraft" if he finds that it is the source of the problem. Again the method for communicating with the supernatural is through a self-induced trance. The nganga believes that he has no personal talent but believes that he has been endowed with special powers for choosing the right medicine. His patients also have faith in his ability to prescribe the right medicine and place their faith in the medicine rather than in supernatural power connected with the medicine (Gelfand).

C. Practices

Among the Mano, diagnosis and cure is attempted only after the shaman determines whether or not his patient has broken some taboo. Again, there are levels of treatment and practitioner. The afflicted person may attempt to work out his problem himself by attempting to find out the cause of his illness and if successful using traditional home remedies. If that does not work, he will often

go to an old "auntie" for herbal treatment. If the problem persists he then will turn to a male herbalist. And finally, to a diviner who will perhaps enable him to expiate the spirit or the law which is creating the problem. If such practice is not efficacious, he may then return to the diviner to determine if it is witchcraft. Then it is necessary to find the witch, request that he lift the spell. If he will not, he may be forced into a trial by poison (Harley).

Among the Mashona the medicine is often symbolic of the problem. Whereas the Basukuma use the part of a tree which resembles the personality of the patient, plus the magical shingira, the Mashona rely extensively on the symbolism of the medicine. Part of a rabbit for fleet footedness, part of a tortoise for steady strength, etc., etc.

The nganga, in addition to trances, uses bones and seed shells to diagnose the problem. Often if the problem is physical they resort to sucking to remove the evil. Gelfand described a female nganga sucking the arm of a woman and then spitting out the evil which consisted of a piece of bone -- apparently tucked into the mouth before the treatment.

Other health practices among the Mashona include the careful observation of taboos and ritual during pregnancy, ability to physically remove or turn babies during labor if the presentation is wrong for a safe delivery and removal of the placenta if it does not come out naturally. An almost universal practice is the rubbing of babies with oil and particular care of the fontelle.

The practices of curers in mechanical or manipulative medicine

have been inventoried by Harley in the appendices of his book on the Mano. In some infants diarrhea is caused by a "worm" which must not go from the bowel to the stomach for it might lodge in the skull and cause convulsions and death. This can be prevented by administering an herbal mixture (Harley).

Most groups recognize the efficacy of manipulation and massage for sprains and dislocations. In one first-person description of a Caesarian section performed by the local surgeon curer, it was reported that the woman was given a great quantity of the local wine. Several people held her down. With a loud invocation, responded to by the people gathered outside, the doctor neatly cut open the abdomen while one of his assistants pinched close the cut ends of arteries. The baby and placenta were removed, the woman pushed up into a sitting position to drain the cavity, then she was stitched up with a combination of thorns and vegetable twine. She survived the operation, as did the infant, and both were functioning normally a couple of weeks later (see Harley, Appendices). Not so dramatically, local practitioners commonly apply pressure to staunch bleeding. Barbed arrows or spear heads are "forced through and out the other side".

Weisz describes an instance of surgical repair among the Masai. A man was carried in with deep lacerations of the abdomen and protruding intestines after a lion attack. The healer replaced the intestines, poured sheep fat into the wound and then stitched it closed. A favorite method of stitching is to stud the edges of the wound at intervals with thorns and then lace the thorns together much the same

way that a shoe is laced. In the case of the man attacked by the lion he apparently survived to lead a normal life.

There have been recorded instances of successful amputation among the Masai (Harley).

Another universal practice is the "washing away" of sickness both outwardly through herbal sponge baths and internally by drinking herbal infusions. (Reminiscent of Goethe's going to Karlsbad to "wash out the evil spirits" of his illness with mineral water.) Included are vapor baths, hot fomentations, poultices, rubbings with clay, infusions to be drunk, fumes to be inhaled. Some headaches and toothaches are treated by powder from the root of a certain tree (Harley).

Small incisions which leave scars are sometimes made on the abdomen of ill children to induce the illness to leave and no doubt to provide a means of departure (Jelliffe & Bennett).

Another East African tribe, the Kisii, practice craniotomy (Weisz). The Luo understand anatomy through studying slaughtered animals and by doing post-mortem Caesarian sections (Weisz).

Healing activities in Zulu societies are related to minor surgery for superficial wounds, midwifery services, and cures for diarrhea which is a disease not thought to be caused by witchcraft (Gale).

Among other practices among ancestor worshipping tribes in Benue is the force feeding of children at weaning "by blocking nostrils and simultaneously pouring liquid food into the gasping child's mouth" (Gunn). This practice is widely followed by other groups in

northern Nigeria. The significance of ancestor worship as a factor in successful MCH programs might therefore be worth considering.

Among most groups, ritual and medical practices are specialized in connection with sexual practices and childbirth. Among some Benue groups the women perform special rituals two months before the expected date of delivery of the baby and take herbal medicine regularly during pregnancy in order to impart to the baby physical psychic virtues and to assure the mother a safe delivery (Gunn).

Una Maclean in her description of Yoruba medical practices refers to the market stalls which still sell dried lizard carcasses, monkey skulls and skins and leg bones and other items to be used in symbolic medicine. The very presence of these items in the markets of Nigeria indicates that magical medicines are very much in demand today. Other stalls purvey herbs.

Among the diagnostic techniques of the mufumu in Sukumaland are attempts to discern through conversation what is happening to the patient emotionally. By gleaning the social facts of the case he can often discern the cause of the patient's discomfort, guilt, fear, etc. If a person finds magic medicine about he will ask, "What have I done?" The mufumu may ask the man the same thing. The patient may manifest neurotic symptoms. He reveals his fears and grievances to the mufumu and establishes intimacy with him. "By such machinery mufumu and customer, so far as the medicine is concerned, become a closely associated unit. This is the primary condition of success (Cory).

Maclean describes a visit to the clinic of an aladura priest in

Ibadan. He was a rather gaunt and wild-eyed fellow and on one wall of his treatment center was a large mural of an Old Testament prophet thus testifying to the Christian orientation of his cult. In evidence were bell, book and water. Through a system of anointing with water and oil, beating the patient on the chest fiercely and commanding the illness to depart he works his cure. Maclean says he resembles more a witch doctor than the quiet and dignified babalawo. The patients of the aladura priest need not belong to the aladura cult. The aladura priest, like the babalawo, takes boarding patients. There is no evidence of drugging patients into submission, but the traditional way of controlling their movements is by shackling their ankle to a heavy log. The clinic described by Maclean had 14 patients. In both the traditional and the aladura clinics the patient usually has a relative close at hand. When the patient is deemed to be fit to return to the outside world, there is a farewell ritual which is supposed once and for all to prepare the way for the patient to pass from one place to the other.

The effectiveness of some traditional African practices for hygiene and preventive medicine has been reported by Ajose. Everyday hygiene consists of children's training to wash their hands and face, the use of a chewing stick for teeth (a similar practice exists in India and Pakistan). Some of the twigs are the roots of plants and contain tannic acid or are bitter, spicy and, therefore, astringent and better than a toothbrush.

Houses among the Ijaw and Kalabari of East Nigeria are traditionally

swept out before dawn to keep the ancestors happy, which in fact, also keeps the family healthy (Ajose).

The Yoruba have borrowed the Islamic custom of eating with the right hand and using the left for cleansing after defecation, demonstrating some awareness of processes of contamination of food (Ajose).

In Nigeria malaria has long been recognized as a disease and herbal infusions called agbo are used for prophylaxis. Agbo is given to children daily to protect against fever and convulsions from cerebral malaria. Anti-malaria agbo consists of bark of the Pycnanthus kombo, root of Combretum micranthum and Heliotropum indicum.

For the treatment of malaria an infusion is also drunk which is compounded from the leaves of the Cassia occidentalis and Rauwolfia vomitoria and morinda. The cassia leaves contain anthraquinone derivatives and have purgative qualities. Morinda also has anthraquinone. Rauwolfia is a sedative. (This drug is used for treatment of psychosis by traditional Nigerian curers and is quite effective. See R. Prince.) An element of contagious magic is obviously present in the Nigerian practice of brewing agbo for strengthening bones and teeth. This mixture contains the teeth or canines of boar or bush pigs. Ajose says it, "...probably [does] have the effect of supplementing the calcium supply to the body in a country where, owing to heavy rainfall, great leeching of calcium salts from the soil occurs and vegetables are deficient in these."

The usefulness and validity of many folk practices can be used as a stepping stone toward education in modern health practices.

"[The] isolation of smallpox cases [among the Yoruba] and the fact that only those who have had a previous attack, including the smallpox priests, are allowed to attend sufferers from the disease shows that, whatever the mythological or superstitious background, the infectious nature of smallpox is recognized and is treated accordingly" (Ajose). When smallpox comes to some villages a drum is beaten, people dance and play the smallpox king, and children are inoculated via variolation. During epidemics a special broom is used to sweep the houses to keep the dust down.

Again, to quote Ajose, "Through mythology and taboo the importance of isolation, disinfection, destruction of fomites, and other useful preventive measures against smallpox have been inculcated. With such a background it is easier to introduce modern methods even where the old faith in a smallpox god is still retained."

Infant circumcision among the Yoruba and other Nigerian tribes may help keep down the venereal disease rate. Female circumcision, if not done at infancy, must be done by the seventh month of pregnancy among the Ibo and Yako. Among the Yoruba it is believed necessary to prevent the loss of the infant. The infant's head and the clitoris must not touch. Ajose says that although it is practiced for reason of taboo and ritual, female circumcision is in fact effective in reducing chronic infection of the genital region. This is especially true among tribes like the Ekoi and the Ibibio where obesity is a status symbol among women and water for bathing is in short supply.

Ajose also referred to the effectiveness of practices in connection

with belief in contagious magic as preventive in infectious disease, tuberculosis in particular. Sputum and chewing sticks can be used by the enemy to make bad juju. Therefore, they are carefully destroyed or covered with earth so that the enemy cannot get at them.

D. Summary

Availability of material on the various societies of Africa reflects trends in the social sciences. Most of the anthropological field work from the beginning of this century up to the present day was done by British social anthropologists in East Africa. However, descriptions of current transitional medical practices in Africa are drawn from Nigeria and Ghana. Both countries have in common pentecostal Christian groups which have had an influence on attitudes and beliefs of the population. These religious groups practice faith healing. They seem to be making their greatest impact in the psychiatric field.

Weinberg describes the transition now taking place among the various health practitioners in Ghana. The native herbal doctors have traditionally treated mental disorders with a combination of herbs and psychotherapy. Some tended to specialize more in physical complaints and others in psychological complaints. Today even schizophrenics are being treated by either the "native doctors" or by adadura priests (the name given to Christian faith healers). It is clear that "native doctors" and aladura priests are critical to modern Africa in the treatment of mental disease and for the well-being of the whole community. The Ghanaian conception of illness is "biopsychological

and holistic" and the native doctor is equipped to handle the whole range. In Ghana, of all those native doctors who were licensed between 1951 and 1960, 49% were herbalists, 43.5% were herbal soothsayers, and 7.5% were fetish priests. Apparently there has been a decline in the latter practitioner and an increase of practitioners who combine ritual and herbs. "Although a few herbalists confined their practice to those with physical maladies mainly, most native doctors did attempt to treat mental disorders and emotional disturbances" (Weinberg).

Weinberg writes, "Native doctors varied considerably in their knowledge, procedural effectiveness and scope of their practice." Some were effective and powerful. Some were forced to take other jobs to supplement their income. The transition in present day Ghana rather than to western scientific psychotherapy is from the native doctor to the aladura Christian faith healer. He is more familiar to the patient than the modern doctor who "lacks supernatural orientation which would enable the psychiatrist to share the patient's conflicts in his own idiom, which the native doctor understood." The Christian faith healer lacks medicine. The native practitioner has both. The official mental hospitals of Ghana have as patients mostly the westernized detribalized voluntary patient, who is disaffected with old traditional treatment. However, for the most part, the rural Ghanaian is still being treated by the native doctor outside the hospital. Even the Europeanized Ghanaian will try the native doctors first because of the stigma attached to mental disease and the "taint of inherited

madness" (Weinberg).

"Christian faith healing is consistent with traditional orgiastic and emotional worship." Jesus Christ is the saviour of the soul and the healer of the body. The pentecostal movement is different than the missionary approach which appears to some Africans as cold, scientific and unemotional. Weinberg refers to "revival as psychotherapy", and to the use of healing water and the wearing of a holy handkerchief both as symbols of a state of grace and concomitant health through faith and community feeling.

Despite the popularity of the native doctor in Ghana, his position is gradually being eroded as urbanization takes place. In the cities he is more and more becoming disorganized. Practitioners, in efforts to organize, are meeting difficulties enforcing standards, recruiting adequate numbers of new members into their ranks, and defending their reputation because of the existence of unscrupulous unqualified practitioners. Nevertheless, they are still considered the most effective in treating psychological problems. How long they will maintain this status, however, is moot because faith healing is gaining favor rapidly as a more effective treatment. Weinberg ended his monograph by saying that with increase in education more and more people are placing their faith in scientific medicine.

The potential for acceptance of modern medical services might be indicated by traditional practices in other areas. Despite Gunn's description of a remote group of Benue people in Nigeria with strong supernatura beliefs and little belief in the empirical cause and cure

of disease, Gunn says that one important fact emerged from his research, "namely, that the 'independent unit', often a single village community in the Plateau Area, far from existing fear-ridden and in savage isolation, conservative, unchanged and unchanging over the years, appears to have adjusted itself rapidly to multifarious changes in circumstances consequent on increasing small-scale movements among the peoples. Every group, in consequence, has developed complex and shifting ties with its neighbours, so that no single classification based on territorial criteria can portray the cultural and social patterns as a whole" (Gunn).

The importance of such flexibility and interdependence not to mention traditional dependence upon medical specialists for certain ills would indicate some receptivity to new services.

Despite contemporary efforts to provide modern effective medical services throughout the greater part of sub-Saharan Africa, where such services are provided they are accepted in many instances but not to the exclusion of folk medicine. They exist side-by-side with folk medicine and will continue to do so -- especially in psychosomatic disease (Lambo-2). Although the mechanics of modern medical techniques will be accepted, complementary services will be provided by the herbalist or witch doctor for a long time to come. That is not to say he does not need and want modern medical services, but it does mean that whoever offers these services must adapt his services and his attitudes to fit the African cultural framework.

Ajose argues that it is results that matter in health services. "It is often very difficult for the uneducated person to understand modern explanations of the causes of various diseases, and he clings tenaciously to his superstitious beliefs". However, it is often superstition based beliefs that can be used for "inculcating preventive measures". All of the Nigerians he talked to agree that smallpox and tuberculosis were bad. The traditional behavior included isolation and non-indiscriminate spitting. Some disagreed with modern medicine and tried folk medicine. But Ajose maintains that some gains were made "by not contradicting certain indigenous beliefs, one gets a hearing. This begets confidence, and once confidence is gained it becomes easier to put into practice modern preventive measures with the full cooperation of the people" (Ajose).

It is not such a distance from aladura or babalawo to the priests, Pentacostal ministers, and psychiatrists of Europe and America. The industrial world has carved up life neatly into religion, medicine and psychology. The African is trying to keep it all together. Unfortunately there are signs that because of culture contact, urbanization, and technology things are beginning to fall apart. Indications are that mental disease is on the upswing (Lambo-1). If this is the case then it would be folly to force feed the African modern medicine and downgrade his own integrated system still farther.

That the African is ready for and can adapt to change might be due to the lack of an awe-inspiring written body of literature such as that of Islam, Hinduism or Buddhism. His traditions have reached him orally, and while he is imbued with these beliefs, he is not fatalistic to the

degree of the Muslims. When a traditional Muslim is urged to accept something new in order to improve his future or which might affect his destiny, he often hesitates on the basis that he cannot affect the future because "it is written" that man and the universe exist at the suffrance of Allah. One also does not have to contend with the Hindu notion of "karma" which means that in order to raise himself to a higher caste status in the next life, the Hindu must just fulfill his caste duty as he perceives it in the role he was born into. If he attempts to change his caste role behavior he will not be fulfilling his karma and, therefore, will compromise his chances for advancement in the next life.

The above concept, however, presents a double edged sword. Because fixed concepts such as karma and Islamic destiny are for the most part absent in sub-Saharan Africa, the African is free to be more flexible. On the other hand, the absence of such dogma gives him little to knock up against when trying to test new ideas and new behavior. Without the clearly delineated limitations characteristic of other cultures, the urbanized or transitional African finds himself in a rapidly changing world with little refuge in the old world and yet with one foot only tenuously in the new. He is, therefore, in many instances, divided and confused.

The African conceives of several categories of disease: trivial, traditional African, European, and fatal (Weisz). "By learning which disease cases fall into which categories, one might predict with moderate accuracy which patients in a community would appear in government clinics

with little or no encouragement, which patients would prefer the tribal doctor and resist western treatment, and which patients would be considered hopeless and denied any help by their families" (Weisz).

Bush and city hospitals and clinics are well patronized. One new magico-medicinal device all over Africa is the syringe and needle (Conacher). It is apparent that there are methods of traditional hygiene, that ancestor worshippers value children to the point of force-feeding them during the critical weaning period so that they survive.

It has been demonstrated that Africans use modern facilities for major and minor surgical repairs and broken bones, especially when the results are often instantaneous. However, it has also been demonstrated that in order for traditional folk to have faith in modern medicine as strong as their faith in the traditional practitioner in some instances modern medicine must prove itself powerful enough to neutralize the evil spell of supernatural powers which manifest themselves in illness and disease.

A review of the literature would reveal that from western medicine the African wants cures for venereal disease, smallpox, and yaws. He wants instant relief from physical suffering and pain. He likes injections, and wants, in most cases, his children to survive him.

The western trained medical person should take it as a matter of course that his patient has merely accepted his services in one little niche of his psyche and will allow these services to operate within a limited sphere. A fact of life for the medical professional in Africa should be that he does not have and probably will not have for some time the field all to himself with regard to the physical health and mental health of the population.

IV. MEDICINE IN ASIA

This section reviews the medical beliefs of India, Pakistan and Thailand. China is mentioned because it has influenced Thai beliefs and because it resembles India and Pakistan in that it has a system of classical medicine.

It is necessary to divide the medical practices of Asia into those which are part of the Great Traditions and those which are part of the Little Traditions. A Great Tradition is the whole constellation of deeply entrenched, well-developed articulated and recorded beliefs and institutions shared by the peoples of a specific socio-cultural area. The Little Tradition refers to local adaptations of the Great Tradition or, indeed, localized practices outside the Great Tradition which exist alongside it, which give an area or a society its own particular sub-cultural identity. The differences between the two traditions may be spatial, i.e., the differences in practices between centers of religious learning and the practices of co-religionists 50 miles away in a remote village with access only via a mud track.

Theoretically, the Great Tradition consists of the orthodox cultural, social and religious beliefs and practices which vary little from, for example, one Hindu religious center in north India to a similar establishment in Madras or Kerala. However, in the villages and towns in between there is great qualitative and quantitative variation of beliefs and practices, called the Little Traditions, all within the Indian/Hindu socio-cultural framework. In India, however, there is also the Muslim Great Tradition to consider and it might be safe to say that the greatest differences in belief occur between the Great

Traditions, i.e., between the basic theological differences of Islam and Hinduism. At the village level, however, although Muslims and Hindus adhere to basically different religious orthodoxies, in any limited geographical area everyday practices are not notably different including clothing styles, beliefs about food, the efficacy of the local saint, about the cause of disease, etc. Thus, Hindus borrow from Muslims and vice versa, and beliefs vary from village to village.

The Great Traditions of Asia are reflected in the articulated, complex bodies of thought known as Hinduism, Islam, Buddhism, Confucianism and/or Taoism. Included as part of the Great Traditions are several classical medical systems. These medical systems are considered more an art than a science and more philosophical than technical, despite elegant and systemic theories relating to the etiology of disease and despite practices related to diagnosis and cure. The Hindu classical system of medicine (Ayurveda) belongs to a body of wisdom and literature begun in India centuries before the Christian era and contributed to Greek medicine. Chinese medical beliefs are associated with the early dynasties and the flowering of Chinese culture which dates back perhaps farther than the Indian system. Avicenna wrote the Canon of Arabic medicine in Persia around A.D. 1,000 when Islam was in the ascendancy. The influence of her art, architecture, science and wisdom spread through the world. The medicine of Hippocrates was based on Ayurved and in turn was the basis of Arabic medicine. Thus, the Arabic medicine carefully preserved the Greek system on which western medicine was built.

In Asia beliefs in the classical medicines are very much alive and well entrenched. Alongside these, however, there also exist myriad local practices with little if any connection to the classical systems. This is the realm of the village herbalist, the village magician or medicine man, the local saint who performs faith cures, and the local gods or godlings. In many of these instances the god or spirit or the curative technique resembles the same god or the same technique for prevention and/or cure in a neighboring village but each might have a different name. Or conversely, there might be several different techniques or beliefs for the same illness in the same village. Sometimes the relationship to the classical system is quite apparent and other times it is more obscure.

Traditionally, in India story tellers move from place to place retelling the ancient epics at village gatherings, and the village elders are well versed in the ancient and classical writings. Villagers all over India know the stories of Krishna fluting by the Ganges with his shepherdesses or of Hanuman, the monkey God, who crossed the water to what is now Sri Lanka to save a young princess. The great and most powerful gods and goddesses have remained the same, but their particular incarnations and, therefore, names have more importance in one place than in another. Nevertheless, the Hindu cultural traditions are imbedded in the minds of the Hindu peoples throughout India and no doubt in the minds of the Muslims, Jains, Parsees and Christians.

The great Muslim epics and myths of India and Pakistan are centered in the history of the origins and conquests of Islam. Doctrinally the

orthodox Muslim has only one god who is Allah and one prophet who is Mohammed. Therefore, cultural, mystical and mythological lore revolve around epic stories of Mohammed, the Caliphs, and the flight of close relatives of Mohammed from Arabia through Asia Minor to Pakistan and northern India. Outside of Rawalpindi in a typical Punjab village one family has a family tree carefully recorded in Arabic which demonstrates descent from the son-in-law of the Prophet. Furthermore, the family knows it came to northwest India, now Pakistan, through the Khyber Pass with Mohammed of Ghazni, the great Afghani conqueror, a mere nine hundred years ago. Such epics are universal among the respective religious groups. Great Tradition beliefs also include beliefs about health and disease.

Morris Opler writes, "The actual conception of the cause of a good deal of illness held by Hindu villagers and the diagnosis and treatment they seek closely follow the explanations and recommendations made by the national leaders of Ayurvedic medicine." However, at the level of everyday life the villages of India and Pakistan, abound with local spirits, folklore, ghosts, and the local cures for disease. Therefore, they also have a variety of local practitioners who are not technically practicing classical medicine although they may be influenced by it. In addition, despite the two major distinct traditions of the sub-continent, many medical beliefs and practices are the same. For instance, despite the strong Muslim sanction against faith in any higher being other than Allah, village Pakistan is permeated with animistic ritual and with faith in the power of the local saint (called pir). These saints work medical cures through divination and possession and much resemble in practice the saints of village Hindus.

Although Ayurvedic medicine is based on a theory of three doshas (wind, bile, and mucous) and Unani medicine on the four humors of Hippocrates, through long contact in India the two systems have absorbed

many of each other's concepts and practices.

These include dietary beliefs for the maintenance of good health and concepts of "hot" and "cold" food and herbs (believed to be originally Greco-Arabic) and the value of semen and the weakening of a man through spoilage or loss of semen (originally a Hindu concept). Both emphasized treatment for men, while treatment for women and children is peripheral or secondary (see Zimmer for Hindu beliefs). Furthermore, the Ayurvedic system, with a well-developed body of empirical knowledge by the time of the Buddhist era around 400 B.C. was carried to other Asian countries with the spread of Buddhism (Temkin).

Classical Chinese medicine has also influenced Asian countries outside India and Pakistan. Its actual practice in China today has attracted world-wide attention. It would appear that the modern medical establishment of China is functioning alongside the Chinese traditional system, and great efforts have been made to amalgamate them.

The efficacy of the system is open to conjecture. In any case, a review of the ups and downs of the status of the traditional system leads to the conclusion that it has changed considerably in the last 50 years due to the vagaries of politics (Croizier). The changing official status of traditional medicine vis-a-vis modern medicine and the final most recent attempts to professionalize it have probably altered the traditional

system to the extent that there is little resemblance between the original and the presently officially constituted system called Chinese medicine. We have no information as to what transpires in the villages. However, the Chinese villager has lived removed from

the central doctrines of his own culture to about the same degree that his Indian and Pakistan brethren have. He has always had a pantheon of local gods, spirits, and ghosts which certainly influenced his health and well-being and which certainly reside outside the bounds of Confucianism and Taoism. The latter two classic socio-religious traditions have stressed the importance of balance and harmony in all things as symbolized in the ideas of yin-yang and feng-shui ("wind and water"). These concepts penetrate the Chinese folk traditions.

Southeast Asia has no Great Tradition which originated there. It is geographically and culturally between India and China. The first Khmer Empire was Hindu and later all of southeast Asia was strongly influenced by Buddhism. It has subsequently been overrun by Chinese and by Muslims in the great era of Islamic expansion. Therefore, today in Thailand, and other southeast Asian countries one finds beliefs and practices borrowed from many cultures, including beliefs and practices related to health and disease.

One could say that Southeast Asia is made up of a group of Little Traditions which have been influenced by or have originated in several outside Great Traditions. The group of Little Traditions have been amalgamated culturally and spatially to form the individual unique cultures and subcultures which presently make up Southeast Asia. For, despite the undercurrents and complexities, combinations and melding processes, the cultures of Southeast Asia are unique in themselves and

unlike any other, each with its own distinct and identifying characteristics.

Any attempts to analyze current medical beliefs and practices in Asia must, then, consider the great medical traditions, the little or localized medical traditions, the blend of both, and, of course, the place of modern medicine within this complex framework.

Charles Leslie refers to the "Professionalization of indigenous medicine", and says that only in India, Pakistan, Ceylon, and China have attempts been made to revive or revitalize indigenous medical systems. "That the ancient medical traditions are a vital part of the popular health cultures of countries throughout Asia can easily be confirmed. But the professionalization of indigenous medicine has not occurred in ...Thailand, Malaya, Indonesia and Burma with anything like the degree of elaboration in south Asia and China, [where there are] professional societies, schools, hospitals, clinics, research institutes, and governmental agencies to promote and regulate the practice of traditional medicine." In other words, the only areas where there has been an attempt to "professionalize" in recent years a classical system of medicine are the areas of their respective Great Traditions. In these areas the systems have achieved status by virtue of being incorporated into the cosmic view of their adherents. The regions where there has been no attempt to professionalize indigenous medicine are regions where the current systems are products of a blending of alien systems through the years. In these areas a consistent body of beliefs and practices is difficult to elucidate regarding many facets of life because of the "borrowing" processes of history. One could go further

and surmise that this has produced the so-called eclectic, adaptable, less dogmatic southeast Asian. This eclecticism is also reflected in his attitude toward medicine (Ingersoll).

Many of the beliefs, and practices in Asia are similar to those of Africa and to Latin America. However, the cultural context is significantly different. Exorcism, divination, sucking, blowing, and sweeping are curative practices in many parts of the world. However, the beliefs about the etiology of disease or the critical factor in the curing process may differ.

A. Medicine in India and Pakistan

1. Beliefs:

According to Morris Opler it is estimated that 80 per cent of all Indians use Ayurvedic medicine and perhaps the percentage is higher among those living in the countryside. In this system "A healthy man is one in whom all the doshas [vata, pitta and kapha] are in equilibrium, whose power of digestion is normal, the tissues and excretions of whose body are normal, as well as soul, senses and mind are in full vigor" (Opler). Ill health occurs when one of the doshas is not functioning properly. The diagnostic method for determining the state of the disturbed doshas is by feeling the pulse. The beat felt by the forefinger reveals the state of the vata, the middle finger the pitta and the ring finger the kapha. This conception of the cause of disease, with minor variations, is adhered to even in the villages. Many of the cases of disturbance and sickness are thought to be caused by faulty diet, and, therefore, by adjusting the diet one can restore health. The

practitioner uses his left hand for taking a woman's pulse and the right for a man. Taking the pulse is a diagnostic technique, obviously borrowed, used by magical curers as well as the traditional vaids, practitioners of Ayurvedic medicine, and hakims, practitioners of Unani medicine (Carstairs).

In the village in the Uttar Pradesh where Opler did his study, dry ginger was thought to be good for vata ailments, coriander for pitta and fresh ginger for kapha. Other fruits and vegetables, eggs and dairy products were prescribed accordingly to their respective properties.

In addition to food and herbs, inappropriate behavior also can affect health. In Opler's study one man in the village with leprosy was described as having violated several social taboos -- the taboo varying according to the informant. But in each case his illness ^{was} thought to be the result of "the disregard of limits which were to be observed." Grave illness was caused because some moral, economic, or religious code had been violated and no compensating redress had been made. Lack of harmony with supernatural causes illness; ghosts bring retribution. It is the task of the local shaman or medicine man to divine what is the root of the problem and then for the patient in conjunction with the priest or the wronged family to redress the grievance.

Social, moral and religious order is a basic cultural conviction which persists all over India. "...one of the root concepts of the Rigveda, the earliest and fundamental Hindu religious texts, is that of rita, or moral and physical order, defended and enforced by the powerful deity, Varuna, and essential to the well-being of man and all the rest of creation alike" (Opler).

Besides bringing drought and famine, the supernatural causes illness, disease and epidemics. W. Crooke wrote in 1896 of the varieties of beliefs in demons as causes of disease and refers to them as the "godlings of disease". "...in Rajputhana, sickness is popularly attributed to Khor, or the agency of the offended spirits of deceased relations, and for treatment they call in a 'cunning man' who propitiates the Khor by offering sweetmeats, milk, and similar things, and gives burnt ash and black pepper sanctified by charms to the patient. The Mahadeo Kolis of Ahmadnagar believe that every malady or disease that seizes man, woman, child or cattle is caused either by an evil spirit or by an angry God. The Bijapur Vaddars have a yearly feast to their ancestors to prevent the dead bringing sickness into the house" (Crooke).

In Bhutan disease is caused by possession and "the only treatment is by exorcism." Among the Garos, Kukis and Khanda (non-Hindu tribal Indians or members of the "scheduled castes") all sickness is caused by a god or by an offended ancestor (Crooke). The list goes on and on through variations on the same theme. Crooke's descriptions are valid even today. He discusses at length the goddess of smallpox, an important goddess throughout India then and now, whether she is called Sitala or Mata. And many people believe that Devi, an incarnation of Kali or Durga (the wife of Shiva) flies through the air and strikes down children during the blazing Indian summer. We call that ailment sunstroke (Crooke).

The mixture of beliefs in India with regard to the workings of the universe and with health and disease is summed up by R. S. Khare who did

a village study in a north Indian village. "The higher castes think about a disease more with the help of the ideas embodied in the greater tradition, while the lower castes largely seek explanations in spirits, impersonal forces, and tribal gods. These latter beliefs are mostly local in content. There is a hierarchy of powers which are progressively benevolent and powerful, finding their extreme expression in Vishnu ('the preserver' in the triumvirate which forms the Hindu godhead). When local spirits continue to do harm even with propitiation then it is sometimes necessary to invoke Durga or Kali, the goddess of terror, represented with a necklace of skulls and an evil countenance, who requires blood sacrifice. She is at once popular and terrifying. To this day Durga puja means animal sacrifice in many parts of India and in Nepal. And not too many years ago there was a man who sacrificed his son to Kali. She is the ultimate being to be propitiated in the Hindu pantheon and in her many incarnations is ever present at the village level.

In Khare's study village the goddess of tetanus is named Jamoga and is believed to be particularly hard on children (no doubt related to the high rate of neonatal tetanus caused by unsanitary practices in treating the umbilical stump). Jamoga is variously thought to be a night-roaming formless creature, a spirit in the shape of a calf or ox or a malevolent Muslim saint. He can be driven out by a powerful Muslim exorcist or by a local pir (saint). One village in the region is famous for curing Jamoga's disease (another instance of alien tribal or caste specialization in the health field). Khare says that "Diseases showing analogous symptoms are confused and treated as Jamoga and lower strata of the society even emphasize that Jamoga is the only spiritual

demon which harms children." (This sounds like the role of Devi in other areas (see above), and one might ask whether or not Jamoga is not just another local Little Tradition form of Kali/Devi/Durga.)

Khare says that in the village there are some houses that act as "communications centers" in health matters. He does not describe the exact function but it is implied that there are enough wise people in that house either to treat minor ailments or to refer more serious ailments to a variety of specialists. Within the village the various "specialists" include the sadhus (mendicant mystics) who come from the spiritual center of Ayodhya, the village herbalist and his priest friends, and a Muslim exorcist -- apparently patronized by Hindus as well as by his co-religionists.

The village gained a reputation for the cure of Jamoga 60 years ago when a powerful exorcist lived there. He could cure smallpox, tuberculosis, and colds as well. In his day he initiated a relative, a village Brahman, and one other villager into his practice. They have either died or left. Now there is one "medicine man-priest [who is] initiating his kin in the art of curing diseases and controlling spirits." The nephew of the medicine man-priest is studying with a sadhu baba (wise counselor) at Ayodhya.

Khare also mentions a travelling healer who specializes in removing wax from the ears who visits the village regularly. He sets up his headquarters under a tree and plays a stringed instrument and sings devotional songs while waiting for customers. He sits, smokes, rests, stays overnight and is often paid in grain as well as cash. He carries herbs and

ointments. He is often called upon to treat eye and nose ailments as well. Khare says he has an interesting mixture of knowledge at his disposal but did not evaluate it. No doubt this has been acquired through years of travelling, talking, listening and practicing.

Khare writes that in 1963 the villagers were receptive to government agents to varying degrees. That is to the hierarchy of administrative and welfare people. They rejected vaccination because they felt "that epidemics are not checked by inoculations because an epidemic is air which cannot be bound and controlled except through the great supernatural powers."

The local homeopath is an ex-zamindar (farmer-landowner-member of the village elite). The villagers accept his medicine more than that offered by Unani or Ayurvedic doctors. Khare did not mention the degree of accessibility of the latter types of practitioner. So the question of preference or expedience is open. He does write, however, that "In desperate moments of illness religion is the sole refuge," and "The experiences of elders and the knowledge of local specialists contribute substantially towards the nature of folk medicine."

D. N. Kakar, in a paper about a North Indian village says, "The popularity of the spirit medium is so great that an Ayurvedic medical practitioner who, at one time, had a good practice in this village, left the village altogether as his clientele was consistently dwindling down." One case involved a mother who had brought her baby to the medium. She had tried three previous healers but with no results. The child was suffering from marasmus, and since the cause is believed to be supernatural there was no use taking the child to a doctor. Kakar said the

mother looked weak and anemic. The mother said that the child was ill because the spirit of her sister-in-law, who had died, had entered her (the mother's) body. The child was imbibing the evil with her milk. The diviner told her to give the child goat's milk in future along with some ritual ashes. The child's health improved and the mother's faith increased.

Kakar reiterates the by now familiar theme: "Through north India, diseases such as smallpox, chickenpox and measles are attributed to the wrath of different goddesses and, in fact, these are never named as diseases; instead people simply say that "goddess has come to their house'."

Still another attempt at analyzing north Indian medical beliefs by H. A. Gould divides the villagers' perceptions into two types of medical needs -- non-scientific called "country or village medicine" and scientific called "doctor medicine". The former is a "complex assortment of common sense remedies and supernaturalistic ritualism which has grown up over time in an effort to cope with sickness in a systematic and predictable manner." Some herbal potions have "genuinely salutary effects". The villager is "unaware and unconcerned with rational bases for the system's validity. In his eyes, it is a body of traditionally sanctioned, ready-made formulae, interwoven with the supernatural, to be resorted to in time of need."

Scientific or "doctor medicine" is related to health clinics, doctors, nurses, and technicians. There is competition between the two systems "through which each has come to serve a distinct class of ailments within

a general range of culturally perceived maladies. Folk medicine is used in cases perceived by the villagers, and labelled by Gould as "critical incapacitating dysfunctions." Doctor medicine is used for "maladies involving sudden and violent onset and complete debilitation" like appendicitis. The former category of maladies are not fatal or fatal by degrees and only partially debilitating, such as arthritis. The only disease which defies classification is smallpox, which Gould called "a doubtful member of the chronic non-incapacitating category." It does maim and kill, but the scars are caused by the evil eye or the glance of a malevolent being. Therefore, rites of propitiation to the goddess are necessary. There is evidence from clinic statistics, however, that the people of the village are growing more and more dependent upon scientific medicine. Gould says that the balance between folk and scientific medicine may be in transition.

"The functional scope of each system has been largely determined by its ability to get results in specific cases of illness." Gould hypothesizes that "doctor medicine moved in and took over part of the folk medicine field," and, therefore, the field for folk medicine diminished. "In keeping with the pragmatic spirit characteristic of so many aspects of his life, the villager has shown a willingness to take what each has to offer. He accepts each to the degree that its use appears to yield favorable results, but he has little conscious awareness of the empirical bases of either system."

G. M. Carstairs described some of the stumbling blocks he encountered when offering medical services in a village in north India, he learned through experience that the doctor's immediate reassurance was necessary for a complete cure. Faith in the cure rested in faith in the doctor,

faith in the medicine and faith in God. However, there is "not the same attribution of personal responsibility to the physician for the success or failure of his treatment, because a sovereign fatalism determined the patient's attitude to events..." "...villagers do not... believe that one can influence the course of events simply by the exercise of technical skill." The cure must be immediate. Another difficulty for the modern doctor is that he must ascertain with little history of the case, the exact problem. If a doctor asks the patient what is troubling him, it means the doctor does not know his business.

Throughout Carstairs' stay the villagers remained skeptical of his medicine because: 1) he did not describe illnesses in the customary way; 2) he did not prescribe elaborate dietary restrictions; and 3) he did not assure them of certain cure.

Unusually large numbers of men came to him complaining of weakness and general debilitation, and his preliminary diagnosis included malaria, anemia, etc., etc. Only when he learned that weakness and dizziness are closely associated with the anxiety-producing phenomenon of "semen loss" did he encourage them to talk. He found that because of the violation of some social, dietary or religious taboo they thought their semen had spoiled. The theory goes that blood is made from food digested with the help of heat in the stomach. It takes 40 drops of blood to make one drop of semen. Semen is the source of strength and is stored in the skull which can take about 20 fl. ounces. The amount of well-formed semen is an indication of "moral and religious status." Therefore, semen loss is grave indeed. To remedy the situation and increase semen,

it is necessary to eat "cool" food which includes dairy products, wheat flour, sugar, some fruits and some of the milder spices. Too much "hot" foods will decrease semen and they include the cheaper and heavier cereals, unrefined sugar, vegetable oil, strong spice and some common fruits. Meat and alcohol are very hot and semen-depleting and, therefore, unhealthy in the extreme. Carstairs points out that the cold foods are expensive and the hot foods are the more common. Thus the poor villager stands a better chance to lose semen and, therefore, social standing than does his more affluent neighbor. The process of semen loss is also influenced by the caste of one's sexual partner and by other indexes of "right behavior." "In general, it can be said that any violation of the many strict rules of behavior which concern the orthodox Hindu is regarded as detrimental to this store of semen, and thus to his mental and physical well-being" (Carstairs). Ruefully, Carstairs adds "No wonder his iron tonics and vitamin concentrates did not work."

Carl Taylor summed up the results of a survey in India with regard to attitudes and beliefs about health and disease as follows:

"The most dramatic finding was the tremendous variation in beliefs in different parts of India. The disease most often attributed to the wrath of a goddess was cholera, with this causation considered important by 49% of people from villages near Vellore; 34% from near Lucknow; 31% from Purulia in Western Bengal, and 21% from near Nagpur. Eating bad foods was thought to be the major cause of cholera near Lucknow, Ludhiana and Trivandrum...Leprosy was also considered to be caused by divine wrath or by past sins near Nagpur, Purulia and Vellore...In most places,

diarrhea was thought to be caused by eating spoiled foods, but in some states there was more concern about eating incompatible foods according to hot and cold categorization. One fifth of the people near Nagpur thought diarrhea was caused by dislocation of the umbilicus and more than half of the responses from Vellore attributed it to 'eating hair unknowingly'. About half of the people near Ludhiana, Nagpur and Vellore also thought that "hot" food was important in the causation of diarrhea...Tuberculosis was thought to be caused by infection in most places; however, 77% of the people in villages near Trivandrum said that it was caused by 'trauma to the chest'...Roundworms showed particular variation with people near Ludhiana and Bengal saying that it was caused by eating mud, near Bombay it was attributed to too much sweet food, whereas near Vellore it was related to eating raw rice..." Taylor-i).

McKim Marriott writes that individuals of the same Indian village -- even of the same family -- often hold highly varied medical beliefs and follow widely divergent practices. Marriott analyzes the position of the healer in the village social organization and relates this to the villager's faith in his ability to heal. He also mentions that very often the villagers are suspicious of any medicine, if free or cheap, whether it is dispensed from a health clinic, Ayurvedic, Unani, or western. It can't be worth much if the cost is not great. Because many vaids, hakims, and dotors in clinics have treated private patients on the side, and, therefore, collect higher private fees, it is believed that better medicine is available after clinic hours when the practitioner no longer dispenses inferior government medicines for a nominal fee.

Speaking of the local health clinic doctor, Marriott writes, that "A persistent rumor held that the doctor would give better, more costly medicines and more energetic treatment if he were approached and tipped privately after hours."

Most of the available field studies about attitudes to health and disease have been in north India. It is relatively safe to assume that among Hindus of south India the same ideas and concepts hold true with regard to the classic practices of Ayurvedic medicine or among the Muslims who may practice a combination of Ayurvedic or Unani. However, data regarding the practices within the localized traditions are not readily available. It may, however, be assumed that the same type of beliefs in various supernatural causes of disease predominates and that the same magic attached to medicine prevails. The godlings of disease may have different names, and the local gods to be propitiated may not resemble completely the ones of north India.

There is little data on the beliefs and practices about health and disease in Pakistan. However, there is reason to believe that in general what prevails in north India most likely extends across the border through the Pakistan Punjab, if not all the way to the Northwest Frontier Area or to Baluchistan and the farther reaches of the Sind. Hakims dispense herbal medicines (and penicillin, too), they take the pulse to determine the state of the humors, they regulate diets to maintain health and cure disease. Besides the hakims, there are villages well-known in their regions for the effectiveness of their shrines and their holy men in healing disease.

M. Zeitlin, in a study for U.S.A.I.D. made a study of Pakistani

food beliefs for use in nutrition programs. Similar studies in India did not apply to West Pakistan, because although the concept of "hot" and "cold" exists throughout India, the food and drink that fit the categories vary from place to place (Taylor-1). In Pakistan, food beliefs were "amazingly consistent". She writes that the population of West Pakistan in July 1972 was "remarkably well educated in the do's and don'ts" of the Unani dietary system. She further adds, "...the food beliefs turn out to be one facet of a monolithic body of pre-modern medical theory. It appears...that the Pakistan public still believes in a popular version of the same Hippocratic medical system which was practiced in Europe and America until about 100 years ago."

She describes the hot-dry vs. cold-moist attributes of food, drink and herbs, and classifies most of the foods in the Pakistani diet. Symptoms of excess of heat and, therefore, a need to balance the diet with "cool" foods include: feeling hot, thirst and dry mouth, gastrointestinal infections including diarrhea and vomiting, nervous irritability including heart palpitations, manic mental states, insomnia, hypertension and other cardiovascular ailments, excessive sexual desire and nocturnal emissions, bleeding including nosebleeds, excessive menstrual flow and abortion, eye or skin infections, and burning or concentrated urine.

Diseases of excess of cold include: feeling cold, respiratory infections, paralysis, depressive mental states, excessive sleep, lack of energy and sexual desire, low blood pressure, anemia, poor circulation, cold limbs, lack of menstruation, rheumatic body pains, excessive urination, edema and diabetes.

Some of the prevalent practices included withholding protein foods from children in summer because they are too "hot". Eggs and fish are totally removed from the diet and meat reduced. In addition, there are specific and well-known diets for specific diseases. Zeitlin summarizes the attitudes about food and drink: "Nutrition and medicine are almost one and the same in the popular mind" (Zeitlin and Ahmad and Zeitlin).

2. Practitioners in India and Pakistan

Charles Leslie makes a distinction between "professional health cultures" and "popular health cultures". "The first term refers to the institutions, roles, values, and knowledge of highly trained practitioners of the indigenous medical systems of South Asia, as well as practitioners of cosmopolitan scientific medicine. Popular health cultures include, the health values and knowledge, roles, and practices of laymen, of specialists in folk medicine, and of laymen-specialists such as avocational practitioners of homeopathic medicine" (Leslie-2). We have already noted the duality and classified them as part of the "Great Traditions" or part of the "Little Traditions". (This is not the same as Gould's separation of village/traditional vs. doctor/modern medicine.

Among the traditional practitioners of India and Pakistan, the Ayurvedic vaids and Unani hakims as members of the Great Traditional establishments or Leslie's "professional health culture", have the highest standing. In India such practitioners were present in a ratio of about 1:1500 of rural population and outnumbered modern...physicians by 10:1 (Neumann, Bhatia, et al). The estimate for pre-1972 Pakistan

was between 30,000 and 40,000. There are no statistics on hakims readily available at the moment for Pakistan.

Carl Taylor writes that "in India organized health services provide only 10% of the medical care. Another 10% is provided by qualified physicians in towns and cities. The balance is split between home medical care and indigenous practitioners." In one area of the Punjab there were an estimated 59 full-time indigenous practitioners for 80,000 plus 300 part-time spiritual healers (Taylor-2).

Traditionally hakims and vaids learned their art through apprenticeship. "Although all twice-born castes were qualified to seek training from a master physician, only Brahmins were to be taught the [sacred] philosophies that provided the metaphysical knowledge necessary for a complete grasp of the science. When the student joined the household of his teacher, he underwent an initiation rite that established a deep spiritual relationship between the two. He was supported by the master through his years of apprenticeship during which he memorized the medical texts and his master explained their significance. Though the knowledge was secular, it was treated in an elevated manner, and imparted in a relationship sanctioned by deep religious feeling" (Leslie-2).

. The position of the practitioners of Ayurvedic medicine in India today is ambiguous. During the 19th century when western medicine arrived in India, Ayurvedic medicine suffered by comparison, but still retained its position as the most popular system among the population. During the nationalistic movements of the late 19th and early 20th centuries there was an interest and some effort to restore the system in order to reflect the glory of ancient India. At that time the movement started to establish

schools of Ayurveda and Unani rather than continuing with the one-to-one master-apprentice system. Leslie analyzes the results of this attempt at "professionalizing" a traditional institution. The end results of such attempts thus far have been an alienation of aspiring Ayurvedic medical students who realize they are being trained to fill in the gap left by the shortage of western style doctors. The Ayurvedic master physicians and teachers feel strongly that the institutionalizing of the system by schools is merely a pale copy of the training system for western medicine which has adulterated the indigenous system. Thus, it would appear that no one is happy with the government's official attempt to recognize and encourage the "revival" of Ayurveda and Unani. In Pakistan, there are Unani schools of medicine, but they suffer the same ambiguous position. Eighty per cent or more of the population depends upon hakims. The schools are officially sanctioned, but the western medicine-oriented Ministry of Health gives them short shrift.

The training capacity in India for Ayurvedic and Unani doctors is summed up as follows:

"Beside the extensive system of colleges, hospitals and other institutions of modern scientific medicine, thirty-two state colleges for traditional medicine existed in 1972. In addition, eighty-three private schools received state aid. These institutions graduated several thousand physicians annually. Of the 257,000 practitioners registered by state boards for indigenous and homeopathic medicine, about 93,000 were said to have had at least four years of formal institutional training. Twenty-six universities had faculties of Ayurveda or Unani medicine. Ten colleges had post-graduate departments, and post-graduate institutes

were located at Jamnagar and at Benares Hindu University. These institutions yearly awarded between thirty-five and forty-five advanced degrees. The state governments listed 9,750 dispensaries for indigenous medicine which they supported entirely or in part, and 185 hospitals with between 20 and 300 beds each. Almost 300 manufacturers of Indian medicine reported an annual turnover of Rs. 500,000 (approximately \$70,000) or more, and seven or eight firms were among the largest drug manufacturers in India" (Leslie-3).

Therefore, the situation in India and Pakistan is paradoxical. Eighty to 90% of the population needs, patronizes, prefers, and has access to a system of medicine which is deemed inferior by the ministries of health and other government agencies. The efficacy of the system in delivering health care is open to controversy. However, because of the popularity of hakims and vaids and the faith of their patients in them, one would surmise that these systems are serving as more than a stop gap at the moment. The familiar techniques for diagnosis and cure are far more meaningful to traditional folk than are the aloof, matter of fact, clinical atmospheres and attitudes of modern medical personnel.

Because of the popularity of indigenous practitioners of the Great Tradition in India and Pakistan it comes as no surprise that Neumann and his colleagues found that the ages of the practitioners were low. "If the practice of indigenous medicine were a dying profession most practitioners would be old. A significant number (28%) of those interviewed were 35 years of age or younger and a majority (57%) were under 45 years of age. Some of the practitioners interviewed had just begun practice,

others had been practicing 25 years or more, and all gradations between were represented indicating that the practice of indigenous medicine is not waning. This is further supported by the increase in the number of registered I.M.P..." Neumann, et al).

The training of Ayurvedic or Unani doctors is not uniform. However, as a rule, according to Neumann they were better educated than the average villager, especially in the Punjab. Half had completed middle school and about 40 per cent had completed high school. Three had been in college but did not finish. Training was a mixture of apprenticeship and attendance in Ayurvedic and Unani schools of medicine. Some practiced a mixture of traditional and modern medicine. The Kerala vaids tended to practice more traditional medicine than those in the Punjab but even one-third of those used modern drugs. Sixty-five per cent of these latter had more patients than the others, a point not to be overlooked in planning future health services. The following two tables on educational status of indigenous practitioners in India was taken from the article by Neumann and his colleagues.

Table 1.

DIPLOMA STATUS OF INTERVIEWED INDIGENOUS MEDICINE PRACTITIONERS

Diploma obtained	Practitioners interviewed			
	Kerala		Punjab	
	No.	%	No.	%
Diploma in Ayurveda	6	46	2	3
Diploma in Unani	-	-	4	7
Diploma in Homeopathy*	1	8	2	3
Diploma in Pharmacy*	-	-	1	2
No Diploma Obtained	5	39	49	83
No Information	1	8	1	2
Totals	13		59	

*Not generally recognized by boards of registration or indigenous medicine

Table 2.

APPRENTICESHIP TRAINING OF PRACTITIONERS INTERVIEWED

Type apprenticeship	Kerala		Punjab		Total	
	No.	%	No.	%	No.	%
Ayurvedic	11	85	21	36	32	44
Unani	-	-	9	15	9	13
Homeopathic	1	8	2	3	3	4
Modern*	-	-	9	15	9	13
Combination of modern with one or more indigenous schools	-	-	13	22	13	18
No apprenticeship	-	-	4	7	4	6
No information	1	8	1	2	2	3
Totals	13		59		72	

*"Modern" refers to an apprenticeship under a practitioner who uses only medicines in the modern (scientific) pharmacopeia. The situation is confusing because there are indigenous practitioners who don't use any indigenous medicines.

Carl Taylor also mentions the popularity of the practitioner who uses modern drugs, and in fact makes the point that there is a completely overlooked source of medical education operating at the present time. "The professors are the drug detail men from pharmaceutical companies, often the largest and most reputable companies in the world. The junior faculty are the pharmacists in the cities. Each pharmacist has a continuing class of practitioners scattered throughout the neighboring villages. The practitioner will drop into the pharmacist's shop and say, "I am seeing a lot of conjunctivitis these days. What do you have that's good?" (Taylor-2). Furthermore, "The indigenous practitioners in some areas have organized into a professional association and have monthly meetings to 'discuss clinical cases and new treatments.'" Taylor goes on to say, "the government has set up a registration system but essentially no control."

Thus far our discussion of indigenous practitioners in India and Pakistan has been restricted to those of the "professional health cultures." There are no India- or Pakistan-wide statistics on numbers of local practitioners who, while borrowing from the hakims and vaidis, have no training. They are referred to as "quacks" and range from peddlars of modern medicine to herbal doctors, to magico-religious practitioners.

McKim Marriott writes "Indigenous medical specialists in an Indian village include priests, exorcists, magicians, and secular physicians as well as numberless minor technicians such as bone setters, charm-sellers, cuppers, cultists, surgeons, and thorn-pullers."

These people are relatively higher or lower in the caste hierarchy of the village.

Between the practitioners of "professional" indigenous medicine and the practitioners of "popular" indigenous medicine is a practitioner who is a product of modernization, transition, or acculturation. His presence has been noted in Pakistan, and he exists in India. His urban establishment has been labelled a "pavement" or "cabin pharmacy", and he has been described as a "self-appointed" hakim. According to Haq and Mahdihassan the "pavement pharmacist" dispenses folk herbal mixtures and the "cabin" pharmacists operate on a higher plane and offers chemical decoctions.

Some basic practices, as described by Carstairs, was family or individual propitiation of the smallpox goddess. At her shrine, her image was bathed, garlanded and cooled down. Herbalists and exorcists would exorcise poison by sweeping an infected area with the twig of nim leaves while muttering an incantation. There were several lesser healers and magicians in the Rajasthan village plus a government dispensary with an Ayurvedic doctor and dispenser. This is where the people felt one got more effective treatment after hours as a private patient of the vaid for a higher fee.

3. Practices

The local home remedies include simple poultices, midwifery practices which include mother and child care and dietary regulation. More serious illness requires the attention of the herbalists or hakim vaids if available.

An interesting curative technique in Afghanistan and Northwest Pakistan is described by Khan and Mahdihassan. The skin of a freshly slaughtered sheep is wrapped around the sick person who is kept resting with a restricted diet. Colds, fevers, pneumonia, typhoid, early tuberculosis and "above all" knife and bullet wounds are treated this way. The "operator" is a butcher and the patient is wrapped in the skin which is still warm and moist. Wrapped tightly, it will serve to staunch hemorrhages, and the moist substance in the skin substitutes for antiphlogistine (anti-inflammatory agent)". It proved a useful technique before the advent of sulpha drugs or antibiotics (Khan and Mahdihassan).

Long lasting and critical illness in the village requires the services of a priest-exorcist for divination and propitiation of the local god or goddess at the temple. Carstairs describes a ritual prescribed by an exorcist for a child suffering from conjunctivitis. The father had brought the child to Carstairs but then reverted to the mystical because the problem was diagnosed as caused by a witch eating the child's liver. It was, therefore, necessary to kill a black goat at midnight, "five men each putting a hand to the knife." The goat's entrails were carried to a place where "three paths meet." One would assume that the demon would then transfer from the child's liver to the goat's and when carried to the intersection of three paths, be unable to find its way back to the child. Carstairs says the idea of deliberately trying to confuse witches existed in medieval Europe, and there is a similar ritual described by Anuman Ragadhon in Thailand (see below).

At the shrines of saints in India and Pakistan the shaman/priest/holy man is able to divine the cause of the illness and then prescribe a cure. "Spirit mediumship is possession in which the possessed person is conceived as serving as an intermediary between spirits and men" (D.N. Kakar). A village medium described by Kakar had been practicing 14 years. He came from a family of farmers and military men and was educated to the 4th standard. He was 42 years of age at the time of Kakar's study, and had received a vision at 13. His vision was identified as that of a saint by another spirit medium. He worked with that medium for one year. "Under his guidance, he acquired sufficient knowledge of the technique of spirit mediumship and also learnt the medicinal and magico-religious herbal lore of his master. He enhanced his knowledge through trial and error and a good deal of experimentation" (Kakar). He built and operated a large shrine with a hall to accommodate 200 people plus six ritual staff members chosen from among village people. Sick people and their friends come to his seances which begin in the evening and last all night. The medium questions his patients about their relationships. In his diagnostic techniques and prescriptions he resembles the African native doctor and witch doctors. For they are both astute in their observations and have a body of empirical curative knowledge to lean on. He diagnoses one illness at a time by going into a trance to the accompaniment of music which he plays on a stringed instrument. He comes out of it with a diagnosis received from the divine. The consultation is not hurried. Time spent on a propitiation ceremony, which he may recommend, takes as much as 10 minutes despite the others waiting for their turn. He is the medium who recommended to the

anemic-appearing mother that she give her infant goat's milk in place of her own breast milk.

According to Kakar he treats 60 out of 200 patients per night and charges range from 25 paisa to 10 rupees according to treatment, charms, etc. Often he was paid with milk or grain or other village produced items.

In discussing the overall effect of spirit medium practices, Kakar writes, "...in the sphere of medical care, the beneficent aspect of spirit mediumship has important implications, especially when it is widely regarded as auspicious, very different from the more nefarious activities associated with sorcery and witchcraft. As villagers seek health, they try to neutralize the evil influences which prevent them from doing so. In order to return to a state of neutrality, they seek the help of the spirit medium, who endeavors to diagnose the cause of their misfortunes and offers some acceptable solutions" (Kakar).

An important dimension in practices connected with illness and cure in India and Pakistan is the social framework. The sick person is rarely isolated, but in fact is surrounded with people who are involved with possible diagnosis and cure of the ailment. One relative or more accompanies the sick person to the hakim, to the doctor, to the shrine, to the seance and even to the hospital where he acts as nurse-companion, caring for the patient as he would at home. Again, the implications of this for modern health services in the village should not be overlooked. It is better to stay home and remain ill in the midst of the family than to go to hospital and be isolated among strangers and strange proceedings. Marriott writes "Village families do not

isolate an ailing member...but rather envelop him...The duties of the attending family members are to protect and gain attention for the weakened person, to help the specialist in his work (since ritual rules of intercaste pollution would sometimes hinder a specialist's treatment), to remember directions for home treatment, and to stand security as a group for the costs of the treatment."

4. Summary

Most of the literature reviewed, (Gould, Marriott, Carstairs, Kakar, etc.) have stressed the importance of the indigenous practitioners, professional and popular, to the great majority of the populations of these countries. This is in part because they are the only practitioners available, but it is also in part because the practices and beliefs of these curers fit into the complex but familiar cultural milieu of patient and practitioner. Marriott and Carstairs make a plea for introducing new or additional medical services from the inside or from the bottom rather than trying to impose new systems from the top. Marriott writes "...it would appear that at present if western medicine is to find a firm place in the village under present conditions, its role must be defined according to village concepts and practices... The successful establishment of effective medicine here appears to depend largely on the degree to which scientific medical practice can divest itself of certain western cultural accretions and clothe itself in the social homespun of the Indian village."

The plea is also made not to ignore or denigrate the local indigenous practitioner for he is in fact the only reasonably competent person the

villager has in times of severe illness. Carstairs says, "...it would be a disservice to these people to try to undermine the chief solace they have in time of trouble." Gould, in his analysis of two kinds of medicine recognized by the villager, writes that as the villagers recognize the efficacy of modern medicine they will move toward it (as witnessed by the popularity of the hakims and vaids who use modern drugs), but if it fails they shift back to the folk system but not all the way. The transitional phase then is one where both systems operate side-by-side and where the folk system is used when the modern system has failed but never quite to the extent that it was used before. Gould stresses the need for folk medicine and believes that it will never disappear for good from India (nor, one may add, from any other country either). Gould writes, "The limited utility of scientific medicine leaves open a relatively permanent area of chronic non-incapacitating dysfunction within which a primitive system of medical therapy may thrive and continue in a complementary structural position in the folk setting."

Kakar, in pointing up the cross purposes between villager and modern health clinic personnel, says that the personnel did not recognize the role of the local spirit medium/diviner as a major curer in the area. One might raise the question, that even if they knew about it would it make any difference in their perceptions of their own role in relation to their constituents. For Kakar notes the "...health centre doctor's failure to understand the integrative nature of cultural and rural people."

There have been a few half-hearted attempts to use indigenous practitioners in government-sponsored health planning. The hakims and vaids are considered as something less than full-fledged doctors. Their

schools are considered to be "backdoors" into the medical profession. Therefore, these attempts have failed to do anything but alienate the hakims and vaids while at the same time putting the western doctors on the defensive - especially in the ministries of health.

The paradoxes of Indian and Pakistani medical services in the rural area can be summed up as follows:

The modern doctors consider their traditional counterparts as less than scientific men of professional ability. Involved in this attitude is the whole range of human feelings stemming from professional jealousy, competition for profit, nationalistic pride, or nationalistic inferiority, i.e., the idea that vaids or hakims are good enough to act as doctors for Indians and Pakistanis while the developed world demands and has full-fledged highly trained modern doctors.

The hakims and vaids in the meantime, trained or semi-trained, appear to have viable practices and are afraid they will lose their identities and their practices if they are integrated into the public sector.

In the meantime, although the people by no means have first-class medical services and although there are indications that they would use more and better services if they could get them, they seem to manage adequately within the present framework. It is safe to say that, disavowed, illegal or outlawed, indigenous practitioners will remain permanent fixtures as long as there is no alternative and even with alternatives, certain services will always be available from the local practitioner which will not be available from a scientifically trained doctor.

B. Medicine in Thailand

Attempts at analyzing Thai beliefs and practices as recorded in the literature are difficult. One reason is the scant amount of primary data on the folk medicine of Thailand. Another reason is the multiplicity of cultural strains found through southeast Asia in general. Another reason is the rapid rate of transition currently taking place in Thailand. And the fourth reason, not unique to Thailand alone, is a modern western form of government superimposed on a society which is essentially folk and Asian. This means that official organization does not necessarily reflect what is occurring in the villages. Rather it means that there are two different worlds: That of the government in Bangkok which is responsible for the well-being of the polity and the polity itself which operates in small units consisting of webs of self-sufficient relationships and dependencies. The villagers are aware of the modern world and government services but not really dependent upon them for survival.

The great complexity of institutionalized beliefs and practices is related to the flexibility of culture and society in southeast Asia. In writing about a Thai village Jasper Ingersoll says, "Regarding health matters these people are pragmatic and eclectic. They want results above all else. They would use any available forms of treatment, often simultaneously." This flexibility is a result of adaptive mechanisms necessary for survival in an area which has historically experienced more than the usual amount of foreign influence if not domination.

In the literature on health for instance, ^{one} author cites the Thai belief that the universe is composed of four elements (Blanchard) -- no doubt a direct legacy from Greco-Arabic tradition which came with Muslim expansion. Another author bases his analysis of Thai attitudes on the Thai belief in five elements -- obviously the influence of the Chinese Great Tradition (Hauck, et al). In still another place is mention of the Thai belief in his karma (Thompson). That is to say, his destiny in the next world depends upon his role behavior in this world. Karma is a Hindu-Buddist concept.

Some of the analysts writing about Thailand have been equally as inconsistent. For instance, in one place Virginia Thompson writes, "The tendency to institutionalize [western] medicine has increased its complexity and cost, with the result that fewer patients are able to be treated and virtually none can pay." A little later she writes "a considerable sum is spent annually on unqualified practitioners."

K. P. Landon writes that the French established a hospital in Thailand in 1669 but western medicine arrived in Thailand in force early in the 19th century when Protestant missionaries introduced vaccination, trained midwifery, surgery, anesthesia, blood transfusions and quinine. At this stage western medicine was little more advanced than local indigenous systems. He says that "Thailand received modern medicine almost as soon as the rest of the world."

The current over-all picture at the outset then is one of a group of people who recognize the efficacy of modern medicine for some ills, have retained their folk beliefs and practices for others, are willing

to spend money on cures, but who greatly underutilize government clinics.

1. Beliefs

The following are some instances from the literature about Thai beliefs with regard to health and well-being. Blanchard writes "Traditional medical beliefs and practices are a mixture of Chinese and Indian theories, Buddhist and animist ideas, and empirical techniques that have been developed through trial and error." Reflecting Ingersoll's notion of Thai flexibility and eclecticism, it has been recorded by Hauck that the Thais do not "appear to have a consistent theory as to the cause of disease" (Hauck, et al). But, as in India and China, they believe in the harmony of the universe and in the harmony of themselves in relation to others and to the universe. If one becomes ill, something is out of harmony or perhaps one has lost part of one's soul. To restore health, harmony must be restored or the soul enticed back into the body. This can only be done by regulating the diet to restore the hot-cold balance or by ritual to induce the soul to return and be strengthened. According to Blanchard "imbalance of the body's wind is the explanation for fainting; earth in the joints results in rheumatism." Such imbalance may occur through magical or natural causes.

Landon, writing in 1932, refers to some barriers to the practice of modern medicine in Thailand, "Patients refused to have incisions or cuts made, on the grounds that their wind would come out and their blood would flow without ceasing, if they did." This same concept of the

escape of the khuan (spirit, soul, heart) in causing disease is reviewed by Kingshill. In such a situation, therefore, it is necessary to find a spirit doctor who can restore the khuan and thereby restore health.

In addition to the above beliefs there are myriad ghosts, demons, evil spirits, and witches to be contended with in preserving or restoring health.

2. Practitioners

A Thai doctor, in the traditional sense, is one who follows the classical systems of India and/or China which have been modified by local usage. In the literature he is referred to as "ancient doctor," "old style doctor" or "herbalist." He practices herbal and ritualistic therapy. Kingshill writes that, "There was absolutely no indication that [the herbal] doctor felt he knew all the remedies or that his methods were the only correct ones. The general attitude seems to be to try anything that has worked once. If other methods also have been successful, one can try them too." Kingshill said the "old style doctor" in one village told him he used the old type of medicine, although he also had some modern drugs. He may use both types of medicine for a sick person. However, the "old type heals very slowly today he maintained." Kingshill adds that the old type of medicine is no longer permitted, but the doctors use it anyway. The doctor he interviewed, like most villages, "also knew how to use sacred words." Blanchard says there are approximately 34,000 of these doctors in existence. Sometimes medicine is a sideline and the practitioner has another full-time occupation. He

usually has a reputation as an effective curer and charges little if anything for his services. He may use medical or ritual methods depending on his diagnosis or on his particular specialty.

According to De Young, the "village doctor" (sometimes called the Tambol doctor) has official government status. He has had no modern medical training but has had some instruction in drugs and hygiene. He could be classified as a "registered quack." It is not altogether clear whether candidates for "village doctor" are selected from the "old style doctors" or were totally outside the field of medicine before appointment and instruction.

In addition, there are Buddhist priests who have knowledge of herbs and people visit the temple for treatment by them. Blanchard writes, "Buddhist monks serve in many areas as medical therapists. They may use traditional medicaments or, like the spirit doctors, rely on animistic ritual cures. Some monks are skilled in the ancient medical techniques, although the rules of the Order forbid them certain curative practices."

It is obvious that the average Thai villager has several sources he can turn to for help during illness. He usually starts with home remedies and manipulation of diet. If more help is needed, he might try propitiation of the house spirit or call in an old style doctor or both. In addition, he may have access to an unlicensed practitioner who uses modern drugs. Blanchard says "Patients often go to a modern doctor when the local practitioner has been unsuccessful or when the disease is recognized as one for which they have learned modern

medicine has a cure."

Ingersoll describes a case of a man with a "sleeping sickness." For some reason he received no help from a small clinic in the area so the relatives called in some "village doctors." Their only desire was the recovery of the patient. Finally, Ingersoll helped them get the patient to the government hospital where he was successfully treated. They^{had} used nearly all types of treatments, sometimes several simultaneously. The women had more faith in the old style doctors and the ritual than did the male relatives or the patient.

Hauck describes a woman, wife of the village school teacher, who carefully gave her infant a nutritious diet and kept his immunization inoculations up to date. However, when the child developed abscesses on his head and the modern doctor did not produce results fast enough she then took him to the herbalist (Hauck - 1).

In the town where Hauck worked there were eight "traditional doctors" (including three Buddhist priests), 15 midwives, two or three massagers, and one medium. Fifteen of 24 seriously ill people in the year she was there had treatment by a modern doctor. Some used a combination of modern and traditional medicine. One child was treated by a traditional doctor, two priests, and a medium plus a second class (licentiate?) doctor in the town (Hauck - 1). As Landon wrote in 1939, "The doctor [presumably modern] seldom is given the opportunity of treating a case from the beginning."

In addition to the myriad practitioners of folk medicine in Thailand there is a growing group of transitional practitioners called

"injection doctors." For the most part, these men are self-trained or have had a little training as minor paramedics in the army, government clinics, etc. They have become adept at administering injections of modern drugs and are popular as healers in Thailand. They resemble the "needle-men" of Turkey. Clark Cunningham writes "They are not officially recognized and are subject to legal action, but in comparison to modern physicians or traditional doctors, they are doing much of the rural curing." This is possible for two reasons. One is the Thai desire for "modern" methods. The other is the lack of official control in the dispensing of modern drugs from the 8,000 modern medicine stores in the country.

Cunningham says,

"Most injection doctors are not ordinary farmers or people in other occupations who supplement their incomes by giving injections, though some such people may do so. They are mobile village or semi-urban people mainly oriented toward this occupation, though most supplement it with other kinds of work (usually farm and garden or craft). Teachers, other civil servants, policemen, traders or some farmers may give occasional injections without being recognized (or considering themselves) as 'injection doctors' by occupation. Injection 'moonlighting' by civil servants is discouraged by many provincial governments and in our province effectively so. Some 'injection doctors' worked previously as assistants or orderlies in rural health stations, urban hospitals (private, military, or civilian government), or pharmacies, while others simply learned from another 'injection doctor.' They are rarely persons who are, or have been 'ancient doctors' or 'magic doctors.' Some 'ancient' and 'magic doctors' know how to give injections, but few do so regularly in my experience."

The injection doctor is looked down upon by modern doctors, and Cunningham says the "ancient doctors" are likewise inclined to look down on them. The villagers, however, address them as "doctor". Unlike the ritual and awe connected to other medical practitioners, ancient

and modern, the injection doctors are considered more like technicians. They perform no ritual and they deal in a "market-type activity." According to one modern doctor, practically every patient he saw had been treated by an injection doctor. Technically the injection doctor is an outlaw but charges are rarely brought against him.

Furthermore, says Cunningham, "Many upcountry physicians and health authorities feel that 'injection doctors' may be more beneficial than harmful, or at least better than no medical care at all...For example, urban physicians may need to prescribe a series of injections for rural people who they know must be served by 'injection doctors' if the treatment is to be sustained. Finally, provincial and district health officers feel unable to communicate with rural people and -- like many other officials -- they are reluctant to act against persons who provide something called 'help' which the government cannot yet replace."

Both of the injection doctors interviewed in depth by Cunningham could be described as peripheral to the social groups among whom they practiced. One was a travelling practitioner with a satchel strapped behind the seat of his motor bike. He had learned herbalism as a young man during monkhood. He had subsequently parted with his family, left his village and became a roving practitioner.

The other injection doctor in Cunningham's study had worked as a "doctor's assistant" in a government health station where he learned to give injections and use medicines. Later he set up a stall in the bazaar where he dispensed drugs and treatment. He was part of the

economic activity of the town but had few friends of his own status in the neighborhood. He was slightly superior to his neighbors but also slightly beyond the law.

3. Practices

Some of the folk practices with regard to health and disease in Thailand are based in belief in the supernatural. Therefore, it is most important to keep the house spirit (phra phum) happy. "Building a spirit dwelling on the occasion of a housewarming ensures the inhabitants good health" (Blanchard). Visiting the temple regularly, and caring for monks is another way of "making merit." In addition, charms and talismans are worn to ward off evil. These consist of images of Buddha, magic words on paper contained in a metal cylinder, worn around the neck on cotton strings, tied around the wrists or ankles of a baby or worn as necklaces by those threatened by evil spirits. Among some of the hill tribes tattooing is a means of warding off evil (Blanchard).

Childbirth practices connected with childbirth include "lying by the fire." This means that soon after delivery the mother is put very close to a woodfire to warm her after the "cooling" process of childbirth. Blanchard refers to it as a cruel roasting of the mother, but Hauck and others refer to it without passing judgment on its effects. There might be even a benefit if shock occurs during the delivery process. Today most women merely take a box of hot charcoals into the bed and near their abdomen and in some cases a hot water bottle is held on the abdomen -- all to help the uterus go back into place. The baby is washed

in warm water which has been boiled and the mother is given only boiled water to drink. The placenta is carefully buried in an auspicious spot in relation to the house to insure the well-being of mother and child (Hauck - 2).

The mother's diet is adjusted to stimulate milk. Herbs are put on the mother's breast and the early milk is expressed because it is not considered good for the baby (Hauck - 2).

The Thai believe that the fontanel of a newborn should be protected against "bringing cold into the baby." Hauck says one often sees otherwise naked babies with caps on (Hauck - 2).

A practice of enticing an evil demon from a sick person, and then tricking him into not being able to find his way back is described by Anuman. The old style doctors would prepare a tray with rice, a clay figure with a piece of the dress of the ill person. He would then move the tray around over the person's head to tempt the spirit to come out. Afterward, the tray would be carried to a place where three paths meet. After the evil spirit eats his fill, theory has it that he will not know which path to take back to the person he left.

A method of diagnosis, according to Ingersoll, is the placing of rice on the yolk of a soft boiled egg. If the rice slips off, the prognosis is grave.

An old style doctor might perform a ceremony consisting of incantations and sprinkling or bathing the patient in lustral water. "A more rigorous treatment involves beating the patient to force out

the evil spirit" (Blanchard). This is reminiscent of the Nigerian aladura priest and the rough treatment of babies with "fright" disease in Latin America (see below).

In addition to rites, rituals, charms, and diet adjustment, the Thais have many sources of herbal or chemical therapies available. "Medicines of the Chinese pharmacist or drug peddler who occasionally comes to the village are also popular; they include traditional Chinese mendicants, modern patent medicines, and such drugs as aspirin, quinine, and sulfanilamide. These are also self-administered and are used interchangeably with native herb drugs" (Blanchard).

4. Summary of Medicine in Thailand

For the reasons given at the beginning of this chapter, the present state of medicine in Thailand, folk and modern, defies analysis. Blanchard writes "In general the association of modern medicine with Bangkok and the west is usually a point in favor of its methods. At times, however, the urban background and scorn of rural ways displayed by the medical personnel introducing the new techniques and ideas arouse antagonism in the village. And many villagers find the impersonality and coldness of the modern doctor or the staff of the provincial hospital a disturbing contrast to the personal interest of the local practitioner and midwife and the loving attention of family and friends."

This same antagonism for the same reasons is apparent in India and Pakistan but perhaps not to the same degree in Africa. The literature is not clear on whether or not "injection doctors" exist in India,

Pakistan, and Africa although Conacher tells us that the needle and syringe are very popular in Africa. This function is probably being performed by the hakims and vaids of India and Pakistan. There may also be a resemblance between injection doctors and "cabin" pharmacy in India and Pakistan, but the injection doctor of Thailand does not set himself up as some sort of ancient or royal practitioner so necessary for the image of the practitioner in the Subcontinent.

The relative absence of one fixed and rigid dogma in Thailand, the presence of a great variety of traditional medical practices, plus reliance on "injection doctors" indicate great potential for acceptance of new medical services in Thailand. There is no indication that modern medicine is inherently suspect. In fact, the contrary appears to be the case. If government clinics are underutilized, one would hazard a guess that the clinics have not tailored their services to the needs of their constituents. They have instead tried to elicit modes of behavior appropriate to industrial or urban societies from people who are traditional and rural. The rural Thai has no problem with his own behavior. The problem is perceived by planners and service personnel.

III. MEDICINE IN LATIN AMERICA

There is a wealth of material on the folk medical beliefs of Latin America. The material chosen for this paper has focused on beliefs relevant to the Andean or Ecuadorean highlands. Incidental to the collection of such data, however, material from other areas (south Texas, Guatemala, and Mexico) came to light which demonstrated a similarity of beliefs throughout much of Latin America. The size of the area alone demonstrates the universality and the entrenchment of such beliefs and their association with distinctly Latin American cultural patterns based on Indian and Spanish traditions and on a mixture of the two. (For a thorough analysis of Mexican folk medical beliefs and practices, see Isabel Kelly).

Medical beliefs and practices vary between rural and urban areas and between wealthy and poor people. The wealthy urban resident, as in most societies, tends to follow the practices of modern scientific medicine, and the peasants and urban poor depend more upon folk practices. The farther from the city, the more reliance there is upon folk medicine. There is a rising demand for modern medicine depending upon education and economic status. (For an excellent analysis of changing urban attitudes toward modern medicine, see D. J. Erasmus.)

Latin America has extremes of terrain often in a relatively small area. The environment ranges from tropical rain forest, to savannah, to the high Andes. The terrain changes abruptly, especially in the northwest within short distances and, therefore, it is not unusual to find tropical and mountain folk with the same beliefs and practices despite the difference in cultural identification. For instance, the Jivaro of the Amazon region of Ecuador and the Quechua of the Andes share many of the same medical practices while possessing different languages,

social organization, and traditions (Gill). Some of the common practices have their roots in ancient Inca culture. However, according to B. R. Salz the highland Ecuadorian Indians share a homogeneous culture reflected in common language, common culture and common agricultural techniques -- and one can assume common medical beliefs and practices. There have been no studies or medical beliefs in parts of the Brazilian interior (Roemer) and obviously other sections of the continent have not been fully explored. However, George Foster writes, "Although in Latin America there is not a single integrated theory of disease, there are certain common themes and patterns which are so general as to form a framework within which local variations can be studied." He refers to these beliefs and practices as a "fusion of two currents" consisting of the American Indian concepts of the universe and man's place in it and the ancient medical heritage of Spain.

A. Beliefs

A general belief found among Spanish-speaking Latin America and among some Indians is described by Erasmus: "The major folk explanation [of contagion] is concerned with the fear of bad body humor. This is most commonly described as due to lack of personal cleanliness." If one does not bathe often enough one can reinfect oneself or infect others. It can cause "skin diseases, infected wounds, and syphilis. Close contact, sexual relations, or seats still warm from a previous occupant are means by which it may pass from one individual to another" (Erasmus).

He then discusses "mechanical" etiologies of disease. By this he means "such things as temperature change, harmful foods, fatigue, and

body blows." Many of these beliefs are related to the Greco-Arabic hot-cold-dry-moist concepts encountered in Asia. However, in Latin America they take on a flavor all their own. The illness described as "mal aire" or "aire" is especially dangerous and comes from sudden changes in temperature. According to George Foster some folk think that central heating is dangerous because movement from a warm interior to the cold exterior disrupts the bodily balance too suddenly and this can cause illness -- especially respiratory disease (not too far removed, one might add, from the common notion in the industrial world that it is dangerous to go out of doors in winter too soon after a warm bath.) Illness is also caused, of course, by violating "hot" and "cold" food prohibitions at certain times and under certain conditions (Foster).

It is commonly believed in Latin America that intercourse with a menstruating woman or sitting on a hot rock causes gonorrhoea. Malaria comes from eating certain fruits or not sleeping enough. In Chile "empacho" (colic?) in children comes from food stuck in the intestines. Great emphasis is placed on "cleaning the stomach" among adults (Foster).

Salz describes the symptoms which are caused by "espanto" or "susto". The patient is believed to have suffered fright or shock induced by "mal d'ojo" (evil eye) or witchcraft which has caused "soul loss" or "spirit intrusion." Children are particularly susceptible to these complaints. They may manifest themselves as pains in the head, neck, back; loss of appetite, lassitude, loss of animation; no pleasure in play or work; constant nausea, unquenchable thirst, drying up, etc., etc. In addition, other magically caused diseases are fever or "ataque"

which is "any fit or illness involving nerves, pains in the lung, rheumatism and toothache. In addition, the rainbow causes tumors and abscesses if not properly propitiated.

Tenzel, a medical doctor, studied cases of susto and espanto in Guatemala. One precaution in handling children is to give them whatever they want so as not to anger them. It is believed that an angry or unhappy child is more prone to susto and espanto. Espanto and susto are considered by some analysts to be psychological states which are effectively treated by shamans or witch doctors. However, Tenzel says that although adults are often successfully treated children often die of susto or espanto. He diagnosed several children suffering from one or other of the maladies and found parasites and/or lower respiratory infections. So, in fact, these states are not necessarily psychological -- although they are treated as such by the Guatemalans.

So grave is susto and espanto that the causative agent of witchcraft is taboo as a subject of conversation. In Tenzel's village there were nine identifiable witches. To complicate matters still further it is believed that the evil eye can be cast unknowingly by the agent. Against such occurrences children and adults wear charms, amulets, and, in some places, children are dressed in red clothing.

Furthermore, diseases such as espanto, susto, aire, and mal de delgadito (a wasting disease, sometimes diagnosed by modern doctors as tuberculosis) are considered local diseases. Therefore, they require local therapy and no modern doctor can cure them (Rubel). Therefore, Latin America also there is a duality in perception of disease: those responsive to traditional cures only and those responsive to modern therapy.

B. Practitioners

As in other parts of the world, there are in Latin America varieties of healers ranged in a hierarchy in the perceptions of the people. Practices include herbal, manipulative and magical methods of diagnosis and therapy.

Practitioners range from the practical midwife and local herbalists who use a pharmacopeia of local herbs and roots to the charismatic saint who invokes Roman Catholic ritual in his healing practices. The generic name of "curandero" or "curandera" in Latin America covers a variety of healers but not usually witch doctors. Romano in his analysis of a healing saint in south Texas, among Mexican-Americans, writes that there is "definite role definition and performance." The curer must "fulfill cultural expectations" within his role. In describing the local folk saint, he describes his ascent in the people's estimation by his selflessness, effectiveness, and ability because of his own personality to impart reassurance that his methods are effective. In this particular case the practitioner was affiliated with a local Catholic-oriented shrine.

At the other end of the pole are the village "curanderas"/"curanderos" (whether they are female or male), usually wise older women who have learned their trade from mother or grandmother and who have a reputation for effectiveness in the village. They are not midwives, for that function is usually performed by a relative or partera. Doctor Vallejo of the Pan American World Health Organization trained four curanderas to serve as health workers in four communities under his jurisdiction while in the

rural health service of Peru. He taught them basic hygiene and simple therapeutic procedures. They staffed the local health centers until he, as the visiting physician, arrived on his routine weekly or twice-monthly visits. He said they were all women, all over forty, all highly revered as "compadres" in the communities and literate to the degree that they could understand a first aid manual be left with them.

The term for herbalist/curandero varies from group to group. Among the Peruvian Andes Indians they are called yatiri (Roemer). "They listen to the complaints of people and offer practical remedies made of herbs and other natural products. They live and work with the people and have their confidence. They give advice to pregnant women, but do not assist at childbirth..." (Roemer). According to Gill in the Ecuadorian Oriente the curandera is called apamamacuna which means "grandmothers". They are "the healers, the gatherers, and the dispensers of pharmaceuticals, as well as the storehouses of the folklore, legends, and rituals with which so many of their therapies are tangled." George Foster writes that curanderos treat folk illnesses with ill-defined symptoms. If the symptoms persist the curandero will say there is a new complication or a new disease. They do not claim to cure all disease and occasionally recommend a doctor. They are fair and open-minded. The curandero who deals mainly in herbs (as opposed to magic) is sometimes called a yerbatero by the Spanish speaking (Salz). There is also some evidence that not all curanderos have the same reputation. Some may have fame and high regard over a large area and others are "regarded with skepticism" (Salz).

The witch doctor is called in Spanish "lrujos" (Ecuador), sometimes "magico" (Mexico) and "page" (Amazonian Brazil). In the Peruvian Andes they are called laika (Roemer). "They have great prestige because they may also offer magical assistance in coping with other problems, outside of disease, like a threat of destruction of crops by hail" (Roemer). It is the witch doctor who is most effective in treating espanto, susto, mal d'ojos -- the disease caused by evil spirits or witchcraft. Besides offering therapeutical services they also act as diviners in looking for the cause of the problem. Roemer says one method among the laikas is to chew coca leaves (the leaf of the cocaine tree and, therefore, an intoxicant) and then spread them on the ground as help in diagnosing. A trance-like state -- in this case induced by the coca leaves -- is a necessary part of the divining process as in India and Africa. In the Ecuador highlands a diviner is called ojveños.

Among the Peruvian Andean groups there is also a practitioner listed by Roemer, known as "kallawaya", who combines "the skills of yatiris and the laikas, offering both practical remedies and magical incantations. Some of these men have learned Spanish, in addition to their Indian tongue, and have acquired knowledge of certain scientific drugs which, however, they may use quite improperly" (Roemer).

Roemer mentions a third type of non-scientific healer in the Mexican village -- similar to "injection doctors" or "needlemen." That is to say, he is not "really part of the indigenous culture, but thrives nevertheless on the ignorance of rural people. He is the

untrained person who claims to be a "doctor", using many standard drugs, but quite lacking in knowledge of modern medicine. He may be someone with a little higher education, who has learned a few points about disease and medicine, but pretends he is fully qualified." He is considered a "quack" and undesirable by the authorities.

And there are the midwives variously known as parteras, comadronas, or curiosas (Foster). They can be men or women, and have long training as apprentices. "In general, they are honest, sincere practitioners and respected members of the community. They frequently cure sickness and alleviate suffering." Foster adds that their knowledge of herbs and psychology is considerable. "In most cases they cannot be looked upon as witch doctors or as frauds or shams" (Foster).

The Latin American follows a pattern in his search for health that is similar to African and Asian patterns. That is, he begins with home remedies. If they do not prove sufficiently effective, he then calls on the village "auntie" who has a variety of other homespun but slightly more complex treatments. If more expertise is required he may seek a full-time healer and/or diviner. Sometimes he will use modern drugs and modern doctors or sometimes a brujo, or a combination of any of the above. Furthermore, often curanderos have succeeded where scientific doctors have failed -- in the perceptions of the patient. Parsons describes a woman informant suffering from anemia and general debilitation. She tried diviners, local curers, two city doctors, a brujo, and pilgrimages to shrines.

C. Practices

In Ecuador, Salz writes, "For their ailments, Indians have recourse to home therapeutic methods and to self-administration of home-made remedies and native herb and mineral drugs as well as of some modern drugs and medicines so far as these are available in markets or retail stores (such as boric acid, milk of magnesia, aspirin, cough mixtures, etc.)". The duality of perceptions is reflected in the eclectic use of such modern medicines, according to Salz, "while that of native medicines is systematic to the extent that traditionally handed-down knowledge and lore is systematic." He goes on to say that, "The same [systematization] applies to the traditionally known therapeutic methods used in home-curing or in the hands of professionals (fregadores [-- massagers or rubbers]). They are based on a mixture of folk empiricism and magic; the important point is that their efficacy is believed in" (Salz).

The indigenous practitioners of Latin America are able to massage and manipulate sprains and dislocations, and prepare poultices of animal fat and herbs (Gill). They have many local herbs which have found their way into modern medicine including cocaine and curare. In addition, Gill lists the use of leche de Oji, "the sap from a tree used as a laxative, antihelminthic or assimilatory agent;" Avelina Rosada, the root of a tree used in scalp treatment, as a hair restorer and as an anti-dandruff medicine; rotenone, a root used as a pesticide; and curare (traditionally used on poisoned arrows and called "flying death") used as a relaxer (Gill). In Ecuador among the Quechua and the Jivaro of

the Andes and the Oriente, respectively, therapy "covers almost the entire range of human ills" including psychiatric suggestion, skillful and intelligent psychotherapy and drugs and herbs.

A universal practice of diagnosis and treatment in Latin America is to rub the patient with a whole uncooked egg (Roemer, Foster, Rudel, Erasmus, Tenzel and Parsons). Not only is this effective in relieving pain and distress, but when the egg is opened one can diagnose the cause of the illness and prescribe treatment. Sometimes the egg is taken to water and opened and the contents dropped in. If the water foams that means the disease has left the patient and was in the egg (Tenzel). The egg is used for "cleansing" which cures pains caused by aire (Parsons).

Another popular therapeutic and diagnosing technique is the rubbing of the patient all over with a live guinea pig. The animal suffocates before the treatment is finished. Then the guinea pig is dissected and evidence of disease is sought among its organs. Once diagnosed, the proper remedy is applied. Sometimes the dissected guinea pig technique is believed to have been in continuous use from the early Inca civilization (Thorwald). In Peru and Columbia sometimes a live pigeon is used in the same way (Foster).

Elsie Clews Parsons, (an anthropologist who worked in the highlands of Ecuador in 1940-41) vividly describes the treatment she underwent at the hands of a brujo. The object was to "throw back a curse". She provided him with a bottle of rum (brujos are "notoriously hard drinkers and incapacitated by day") and some cigarettes. The process

was begun at his house in the evening and involved his spraying her all over with mouthfuls of rum and blowing smoke in her face while muttering incantations ("I believe in God; I believe in the Holy Virgin."). He looked in her eyes and at her tongue, manipulated her toes, ankles, fingers and wrists. And the whole process reached a dramatic conclusion when he sucked from either side of her neck a two-inch long "worm". The effectiveness of the treatment apparently is dependent upon the over-powering personality of the curer. Brusqueness and hyperactivity are the only way to exorcise evil. One wonders if Parsons didn't feel worse when she left than she did when she went in. She was supposed to have 12 treatments, but it is not altogether clear whether she returned to finish the course.

Other practices include drinking and bathing with herbal infusions (Beals), sweeping away pain and infections with herbs (Rubel), curing skin eruptions caused by the rainbor by "blowing" rum and urine on the patient (the rainbow can be propitiated by urinating in its direction) (Parsons). Espanto in babies can be made to depart by holding the baby upside down and shaking it and shouting (Parsons). For an older child one puts a leaf on his belly and waves a rosary around all the time calling the child's name, or "visit the place of fright and scratch a cross on the ground" (Parsons). The proper location of burial of placenta after birth, helps the mother's uterus to return to normal shape and position. Lack of proper burial (often under the kitchen hearth) means pain in the abdomen (Erasmus).

D. Summary

Latin America offers a rich field for testing theories and methods in attempts to introduce modern medicine in traditional societies. The current data reveal varying opinions on the efficacy of folk medicine and social resistance to modern medicine. Salz says that among the Andean Indians of Ecuador "To judge from extended descriptions of curandero medicines and practices...it may be doubted that they are of objectively therapeutic use." On the other hand, Gill, in his highly romanticized description of medicine in the same general area, praises the folk wisdom and techniques of the various practitioners, whether psychological, medicinal or manipulative. George Foster writes of indigenous practitioners that they do alleviate suffering, that their knowledge of herbs and psychology is considerable and "in most cases they cannot be looked upon as witch doctors or as frauds or shams."

On the other hand, there is abundant evidence among Indians, Spanish, and mixed groups that they do seek help from modern doctors in the clinics in the rural areas and in the hospitals in the urban areas. In Quito, where women hesitated to go to the hospital for child birth because of the lack of observation regarding taboos (food, bathing, and disposal of the placenta), it is now being recognized that the "aire" in the hospital must not be too bad because, even with the windows open, most of the women and infants survive (Erasmus). The necessary condition for increased use of modern medicine resides in the empirical observation that it is effective. Foster says that mothers in Chile

recognized the effectiveness of a whooping cough inoculation program.

In the countryside where disease is caused by the supernatural or by psychological disruption, the curandero may still be the most effective healer, but among school children in the urban centers, where the etiology of some diseases have been explained, some of the folk beliefs are giving way to modern beliefs. Modern explanations of etiology of disease were more likely to be accepted by nursing students (who had completed high school), than by nurse's aides (who had completed grammar school), and more by third year nursing students than by second year nursing students (Erasmus). Schoolboys emphasized the importance of the specialist (indigenous or modern) in treating disease and schoolgirls "had more faith in the home remedies they had learned from their mothers" (Erasmus).

In Latin America the curanderos/curanderas and midwives form a pool of ready-made paramedics. At the present time in Ecuador they are not recognized and are even subject to legal sanction but strong measures to eliminate curanderos have not been taken indicating tacit recognition of their value to the people. A major consideration when training anyone within a folk culture beyond his traditional field of competence is that such training might compromise his position and thus his effectiveness among his peers. However, it is suggested that the curandero, as a respected, trustworthy member of a relatively egalitarian society could be of great value in introducing modern medicine in the community. Furthermore, there is some evidence that some curanderos are able to make

the transition and contribute insights from their years of experience in diagnosis and treatment. There have been attempts in Latin America to train paramedics in public health programs. However, there is no indication in the literature that these people have been drawn from the group of indigenous practitioners. The above noted informal training of curanderos by Dr. Vallejo was apparently strictly ad hoc but effective.

Despite the inroads being made in introducing modern medical services in Latin America to traditional folk, it is probably safe to say that the vast majority of the people do not have access to them. There is still resistance to many forms of modern medicine. As in Asia and Africa, the resistance is attributed to strangeness of modern methods in diagnosis and treatment, slowness of results, the sterile atmosphere of the clinic, disdain and condescension on the part of clinical personnel, and in one case noted by Roemer, underattendance in a rural clinic because, after making the long journey for medical help, the patients and their families often found the clinic closed and unattended. Therefore, in spite of elegant cross cultural theories as to why modern facilities are underutilized the simple fact is that often such services are inaccessible.

(See Scrimshaw for the various reasons for resistance to family planning center attendance in Ecuador. These extend from well-entrenched beliefs about female modesty (pudor), the timing of the clinic's hours, *and* rachismo or male pride, etc.).

Perhaps modern clinics should subtly offer to help cure espanto, susto, aire, and mal d'ojo, etc. and treat the variety of symptoms which make up the complaints so named, without writing the "diseases" off as so much superstition.

It has been suggested that initial efforts in introducing modern medicine in rural areas stress curative medicine, for it is effectiveness that the villager is looking for. Furthermore, he only visits a practitioner when he is sick. Foster says if he does not feel sick he thinks he cannot be sick, therefore, until the efficacy of prevention can be obviously demonstrated (as in the above-mentioned whooping cough prevention campaign), stress should be on curing. When positive results are demonstrated, the people will accept modern methods.

To end this section on an optimistic note, Roemer writes that despite experiences of resistance to new medicine in Latin America, "the long-term trend is clearly toward a reduction of the dependence of rural people on primitive medicine and a heightened utilization of scientific services that are offered".

VI. CONCLUSIONS

There are striking worldwide similarities of beliefs and practices associated with health and disease in traditional societies. The universality of some practices (such as hot-cold characteristics of food and disease) can be attributed to culture contact and diffusion, especially if they are part of a Great Tradition. However, not all common practices can be so easily demonstrated to be results of diffusion. Included among these are the sucking out of illness or sweeping or blowing it away, the rough handling of possessed patients, and the trance state of diviners necessary for diagnosis. Cultures as diverse in time and geography as India, Thailand and medieval Europe share the practice of inducing evil spirits from the patient into an object which is then carried to a place "where three paths meet". Ritual disposal of the placenta is important at least in Thailand and in Latin America. Thai mothers protect their babies' heads from cold by covering them with a cap and a similar practice exists among the inheritors of Inca cultures. The fontanel of infants generally are objects of special consideration through the world. The egg is a diagnostic tool in Thailand and in Latin America. Such shared characteristics pose the question whether they are instances of diffusion or coincidence or illustrations of human behavior which support Claude Levi-Strauss's theory of the basic structure of the human mind.

At a different level of observation and analysis there are other

similarities. These are similarities of structure and process of health and health services as they exist in traditional societies. It is doubtful that such complex structures or processes are transferred in toto by diffusion. Furthermore, the form and content of the parts may vary from area to area. Nevertheless, investigators of several professions and several nationalities and at several points in time, beginning in the last century and continuing up to the present, report three important analytical concepts relating to health and disease throughout the traditional world. These are integration, hierarchy and duality.

It is observed over and over again that traditional societies view health and disease as functions of an integrated socio-cultural system involving man and his relations to his fellows, his environment, his gods, and the universe. Secondly, it is apparent that in the fields of health and disease the institutions for dealing with them are ranged in a hierarchy starting with home remedies and culminating in magico-religious practices. The third concept, applicable in most parts of the world today, is the traditional man's dual perceptions of disease as either indigenous or "foreign" and the appropriate treatment, therefore, being either indigenous or foreign--that is, folk or modern.

The implications of such theoretical processes and structures for inducing change may be helpful. The integration of health and disease into the entire socio-cultural fabric of a group means that attempts to superimpose an entirely new system on that group will fail. Anything is possible at gunpoint, and thus the possibility exists of alleged successes wrought by the "great leap forward" in China. However, short

of such methods, it is doubtful that superimposition of modern medical methods and the outlawing and punishing of indigenous practitioners will work. Equally doubtful is the morality of such efforts. For such legal sanctions are really a part and parcel of systems of government developed in highly industrialized and compartmentalized societies. And although as mentioned above, the governments of the Less Developed Countries of the world may be modern, institutions at the grass roots often are not. Maurice Freedman writes that often health workers make two false assumptions about local communities. The first is that "the administrative framework of a country necessarily gives the social pattern for the country as a whole" and therefore all the health worker "needs to do is use lines of communication" set up within the administrative framework. The second is the assumption that government plans and schemes for betterment reflect a situation that exists in reality, i.e. that legislated reforms equal existing reforms. He goes on to make the point, which cannot be made too strongly that the administrative units and traditional units are "by no means coincident". To resolve the difficulty, Freedman says that the health worker, in order to influence change, must see himself as a member of a social system which includes his public and his colleagues.

The health hierarchy in traditional societies does not operate rigidly. That is, people sometimes try several treatments at one time. They move back and forth from herbalist to diviner to shaman, sometimes to modern drugs or to modern hospitals. The flexibility allows for

manipulation by the modern health worker if he can find a niche for his services along with all the others and if he learns what his appropriate role might be within the structure of the community.

And this brings us to the concept of duality. Change and transition are taking place. There is hardly an area where modern medicine has not made itself known. Acceptance of it, as we have seen, varies from country to country, from city to village. It is safe to say that the urban elite avail themselves of modern medicine more than the urban poor and that urban residents use it more than the rural residents. In many areas the rural and urban poor have recognized the efficacy of epidemic control and modern drugs and surgery.

That is, modern technology has broken through the traditional world view. With success comes patronage. Therefore, in the dual structure, since modern medicine already has a piece of the pie, the best use of additional resources might be in areas where there are already indications of receptivity, both in diseases and geographic areas. If the mothers of Chile have recognized the positive effects of whooping cough immunization, why wouldn't the mothers of Peru? Where smallpox or malaria eradication programs have had success, such as they have on all continents, use the same manpower and facilities to confront other disease. In other words, if modern public health and medicine are to adhere to this anthropological concept, they should aim at enlarging the areas in which they are believed to be effective by moving laterally into new areas rather than by trying to superimpose whole new systems.

Traditional societies are stable but they are not static. They absorb and assimilate and reform constantly. Modern medicine is already being accepted at differential rates of acceleration throughout the world. It has already usurped a large part of the field that once belonged to traditional medicine and is constantly making further inroads. It will not have the whole field to itself for a long time, but that is as it should be unless the traditional world completely disappears.

The most susceptible groups for the introduction of modern medicine are the urban poor, those relatively newly arrived from the countryside. They are marginal already - having left some of the rural folkways behind, eager to become modern, still very much hampered by ignorance and superstition, but deprived of the support of the small integrated village unit.

As with airports and other modern facilities, modern hospitals in urban centers throughout the world more or less resemble each other in facilities, organization, and services. Perceptions and practices of urban elites also resemble one another around the world or at least cross-cultural difficulties in communication and understanding are at a minimum among these groups. Critical differentiation begins to take place between cultures as one moves away from the urban elite toward the urban poor or the rural folk. Since current health efforts are being made among the latter two groups it is important that facilities and services be adapted to the specific socio-economic group within the

larger community. The large city hospitals of Lagos, Quito, Bangkok or Karachi might resemble one another, but the small rural health stations would presumably have a more limited sub-cultural framework within which to operate and, therefore, the atmosphere, facilities and services should be adapted to the area. Programs developed for rural Nigeria will not be necessarily fitting for Ecuador. Facilities designed for Pakistan or northwest India will not necessarily draw patronage in northeast Thailand.

In discussing the manpower potential for modern medicine of indigenous practitioners, we can quote Fendell "So long as the [medical manpower] void exists there will be those who will attempt to fill it, regardless of training or competence. The prevalence of untrained 'practitioners' is an outward expression of want by the people. Legal action to [eliminate such practitioners] will continue to be entirely ineffective."

It must be emphasized that most indigenous practitioners are not quacks. Quacks are defined as "frauds" or as "charlatans". Many quacks exist, and those practitioners who are fly-by-night dissemblers or who prey on ignorant people for quick profit can truly be classified as such. However, virtually all of the indigenous practitioners described in the literature genuinely believe that the results of their treatment are a result of empirical and pragmatic practices. In many instances among village practitioners, little, if any, payment changes hands. They have been highly regarded as trustworthy people

over a long period of time. Even the planting in the mouth of a bit of bone or a worm shaped object by the witch doctor who sucks out the evil, is part of the efficiency of the treatment. The patient and the witch doctor believe in its effectiveness. The practice might appear fraudulent in light of modern technology but in the mind of the practitioner and patient it is not. In some instances it is difficult to draw the line between genuine well-meaning practitioners and quacks. Perhaps the groups most sensitive to the thin line are the educated elites of the developing world who recognize scientific efficiency but who have not completely parted with tradition. A "quack" then exists in the eye of the beholder and is a relative term.

Statistics on numbers of existing indigenous practitioners have been cited when available and in the form presented in the literature. There are no firm figures in most parts of the world because the practitioner in most cases is no more notable in a rural village than a tin smith or the local barber. However, it is probably safe to assume that there are several herbalists and/or midwives and shaman-priests in every rural village throughout the world.

The vaids and hakims of India and Pakistan are popular among their patients and recognized by their respective governments. However, their potential as practitioners of modern medicine is hindered by their philosophy, background, training and position in the community. They are identified as occupants of traditional roles which are bound up with deep-seated and revered socio-cultural attitudes among the

populace. A truly integrated system of modern and classical medicine would require a radical transformation in the deep-seated beliefs of practitioners on both sides. Western trained doctors feel that the caliber of medicine currently offered by the vaids or hakims is unscientific and second rate and therefore its advocacy is immoral. The traditional doctors quite rightly resent being considered for roles as paramedics or secondary doctors and thereby losing their status and identity. Furthermore, much of the confidence in the vaids and hakims resides in the fact that they are private practitioners and not, in most instances, attached to government facilities. There is often an instinctive suspicion of government-introduced programs. The public health clinic belongs to "them" but the vaids and hakims are one of "us".

Nowhere in the world have official attempts to integrate folk medical practices and practitioners with modern medical practices and practitioners been wholly successful. In India and Pakistan traditional systems operate alongside modern systems and both are recognized by government.

Much has been written about recent Chinese successes in integration. The Chinese people have access to both Chinese and modern medicine. Modern doctors have been trained in some traditional practices, like acupuncture, and are urged to study the utility of traditional herbs. The degree of training in modern techniques given to traditional doctors is not altogether clear. It is doubtful that the systems are integrated for the treatment of a single patient. There is no indication

in the literature that traditional doctors are practicing as full-fledged doctors or paramedics in modern practices. The "barefoot doctors" are chosen for the most part from among lay persons and are trained in basic health practices, hygiene, and health education, and given enough knowledge to know when to refer a patient to a professional. This is not to say that the two systems do not operate in China nor that traditional practices in China are not efficacious. However, what integration has taken place has been virtually by command. This option is not open to most of the world's governments.

When speaking of India, Pakistan and traditional China, we are speaking of societies with highly complex social systems where role expectations have not been traditionally flexible. This implies that trying to change the role of a given person is a risky business. For if trust in the vaids and hakims is dependent upon their relation to an ancient and mystical body of knowledge and power, by educating them out of that role one is educating them out of the role expectations of their patients and thereby losing their potential effectiveness. What modern medicine they do practice is no doubt accepted because of the faith the patient has in the practitioner, the person, rather than in the medicine he prescribes.

Therefore, the potential paramedic must be drawn from other groups of indigenous practitioners including the village herbalists (or his sons and daughters), the midwives (who have already been used somewhat successfully in modern programs throughout the world. See Chen.),

druggists and "injection doctors". The functions of these people more nearly resemble "market place" activities than do the traditional doctors and even the village herbalist might be regarded as merely a respected technician. Many times the middle level practitioners are already looked upon as specialists and are called in from outside the local group. Therefore, with a little added training their positions in society would not necessarily be compromised and their services would remain acceptable to their patients. A group also not to be overlooked are the myriad dressers, dispensers, and laboratory technicians already operative throughout remote parts of the world. Many of the latter have been trained in some official way but have later set themselves up as independent druggists.

In Latin America, the most effective person for rural medical programs appears to be a member of the local group. In the one instance where they were given a role in rural health programs their effectiveness was based on their assured position in the community. They were useful because they had the confidence of their neighbors. This may reflect the lack of a rigid social hierarchy in rural Latin America in contrast to rural India and Pakistan. However, it is quite possible that a natural candidate for training as a paramedic in a village in Pakistan or India might be the village "auntie" -- often the wife or sister of the village headman. She has a certain amount of independence and autonomy in the village by virtue of her prestige and age (usually well into middle age). She is often the "confidant" of the village women in any

case and is already dispensing advice and treatment and it is doubtful that with training her position would be compromised.

Because at present in many parts of the world indigenous practitioners, like the curanderos in Ecuador and injection doctors in Thailand, are not only officially unrecognized but practicing beyond the law as well, the turnabout on the part of government to try to reach these people and recruit them for a government program might be embarrassing if not impossible. Governments have created the problem because of unrealistic policies developed to force change.

Ironically, it is the very illegality and marginality of many of these practitioners that make them ideal candidates for use in a health program. In the first place, they are familiar with what such programs entail (unlike candidates fresh from primary or halfway through secondary schools), and they are dispensing medical services. Secondly, in many instances they are already not members of the social group whom they treat. Therefore, their positions vis-a-vis the group would not change. The one drawback for recruiting from among the existing "professional" paramedics in private practice might be their innate suspicion of government. After being on the outside for so long one wonders if they would readily accept training. Secondly, many of them are probably earning more in private practice than they would in government service.

Most traditional societies are aware of modern medical services and want more such services if they are offered with understanding.

Secondly, there is a manpower pool of intermediate health practitioners available for use in modern health programs.

The felt and real medical needs of rural peoples will vary throughout the world. They can only be determined by on-the-spot observation and analysis. Without such knowledge, it would be difficult to plan modern health services for, as Lambo writes, it is clear ".that prevention, treatment and rehabilitation are one, that man is totally related to his environment and social organization, and that no health program which hopes to have meaning for the individual and the community it serves can safely ignore this unity."

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