CHAPTER – 1

INTRODUCTION

The determinants of health can be attributed to social and economic factors, which most health systems have not been able to link with the health of their populations. The health issues are complex and necessitate systematic knowledge that goes well beyond the health sector to address them. The creation of this knowledge involves a number of social science disciplines working together with the medical profession. For instance, cost of medical care is a real concern to poor people throughout the world. Therefore, poverty and vulnerability of livelihood determines health status and vice versa. Health is a major contributor to poverty. However, there is little logical information about how people's livelihood is affected when an earning hand in a family suffers from a serious health problem, or about how family, community or other social networks help that family to cope with the hard times (Institute of Development Studies 2005)\(^1\). Also, what happens when a child falls sick or for that matter, what are the patterns of health care seeking of women in a specific society?

Members of poor households in rural areas are most likely to be undernourished, use unsafe water sources and be exposed to indoor smoke from solid fuels. Due to these… risk factor exposure and hazard, relevant analysis and assessment of the health benefits of simultaneous reductions in multiple risks should

be included in the policy. (World Bank 2006). Health seeking behaviour is not merely dependent on individual's choice or circumstances; it depends largely upon the dynamics of communities that influence the well-being of the inhabitants (MacKian 2001).

The concept of ‘health seeking behaviour’ has evolved with the course of time and has ultimately become a tool for understanding how people approach and utilize health care systems in their respective socio-cultural, economic and demographic circumstances. All these behaviours can be classified at various institutional levels: family, community, health care services and the state. One of the essential functions of public health is to use the applications of social and behavioural sciences for better understanding of the disease process (Pommier 2005). Social position of health has been studied taking socio-economic status as an indicator (Craig and Forbes 2005). It is therefore imperative to study the impacts of all the determinants of health seeking behavior, such as ethnicity, education of mother, gender of child, lifestyles, or economics of a community (Caldwell and Caldwell 1991). Unfortunately, policy

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makers and health practitioners do not reflect on social determinants while developing policies.

**Culture influences health beliefs**

All cultures have systems of health beliefs to explain what causes illness, how it can be cured or treated, and who should be involved in the process. The extent of patients having education have cultural relevance for them, and also have a profound effect on their reception to information provided on healthy issues and their willingness to use it. Western industrialized societies such as the United States, which see disease as a result of natural scientific phenomena, advocate medical treatment that combats microorganisms or use sophisticated technology to diagnose and treat disease. Some societies believe that illness is the result of supernatural phenomena and promote prayer or other spiritual interventions that counter the presumed disfavor of powerful forces. Cultural issues play a major role in patient compliance.

There are several important cultural beliefs among Asians and Pacific Islanders that health practitioners should be aware of. The extended family has significant influence, and the oldest male in the family is often the decision maker and spokesperson. The interests and honor of the family are more important than those of individual family members. Older family members are respected, and their authority is often unquestioned. Among Asian cultures, maintaining harmony is an important value; therefore, there is a strong emphasis on avoiding conflict and direct confrontation. Due to respect for authority, disagreement with the recommendations of health care professionals is avoided. However, lack of disagreement does not indicate that the patient and family agree with or will follow treatment recommendations.
Among the Chinese, since the behavior of the individual reflects on the family, mental illness or any behavior that indicates lack of self-control may produce shame and guilt among patients. As a result, Chinese patients may be reluctant to discuss symptoms of mental illness or depression.

Some sub-populations of cultures, such as those from India and Pakistan, are reluctant to accept a diagnosis of severe emotional illness or mental retardation, because it severely reduces the chances of other members of the family getting married. In Vietnamese culture, mystical beliefs explain physical and mental illness. Health is viewed as the result of a harmonious balance between the poles of hot and cold that govern bodily functions. Vietnamese don’t readily accept western mental health counseling and interventions, particularly when self-disclosure is expected. However, it is possible to accept assistance if trust has been gained.

Russian immigrants frequently view U.S. medical care with a degree of mistrust. The Russian experience with medical practitioners has been an authoritarian relationship in which free exchange of information and open discussion is not usual. As a result, many Russian patients find it difficult to question a physician and to talk openly about medical concerns. Patients expect a paternalistic approach. The competent health care professional does not ask patients what they want to do, but tells them what to do. This reliance on physician expertise undermines a patient’s motivation to learn more about self-care and preventive health behaviors.

Although Hispanics share a strong heritage that includes family and religion, each sub-group of the Hispanic population has distinct cultural beliefs and customs. Older family members and other relatives are respected and are often consulted on
important matters involving health and illness. Fatalistic views are shared by many Hispanic patients who view illness as God’s will or divine punishment brought about by previous or current sinful behavior. Hispanic patients may prefer to use home remedies and may consult a folk healer, known as a curandero.

Many African-Americans participate in a culture that centers on the importance of family and church. There are extended kinship bonds with grandparents, aunts, uncles, cousins, or individuals who are not biologically related but who play an important role in the family system. Usually, a key family member is consulted for important health-related decisions. The church is an important support system for many African-Americans.

Cultural aspects common to Native Americans usually include being oriented in the present and valuing cooperation. Native Americans also place great value on family and spiritual beliefs. They believe that a state of health exists when a person lives in total harmony with nature. Illness is viewed not as an alteration in a person’s physiological state, but as an imbalance between the ill person and natural or supernatural forces. Native Americans normally depend on a local medicine man or woman, known as a shaman for meeting their health care requirements.

Each ethnic group presents their own perspectives and values to the health care system. Many health care beliefs and health practices differ from those of the traditional health care culture. Unfortunately, the expectation of many health care professionals has been that patients will conform to mainstream values. Such expectations have frequently created barriers to care that have been compounded by
differences in language and education between patients and health care providers from
different backgrounds.

Cultural differences affect patients’ attitudes towards medical care and their
ability to understand, manage, and cope with the course of an illness, the meaning of a
diagnosis, and the consequences of medical treatment. Patients and their families bring
culture specific ideas and values related to concepts of health and illness, reporting of
symptoms, expectations for how health care will be delivered, and beliefs concerning
medication and treatments. In addition, culture specific values influence patient roles
and expectations, information about illness and treatment death and dying,
bereavement patterns, gender and family roles, and processes for decision making.

**Cultural Views of Health, Illness, and Healers**

The definitions of health and illness differ from culture to culture. A condition
that is endemic in a population may be seen as normal and may not be defined as
illness. Ascariasis in young children is perceived as a normal condition in many
populations. Similarly, malaria is seen as normal in some parts of Africa, because
everyone has it or has had it. In Egypt, where schistosomiasis was common and
affected the blood vessels around the bladder, blood in the urine was referred to as
“male menstruation” and was seen as normal. These definitions may also vary by age
and by gender. In most cultures, symptoms, such as fever in children are seen as more
serious than in adults. Men may deny symptoms more than women in some cultures,
but women may do the same in others. Often, adult denial of symptoms is due to the
need to continue working.
Parsons (1948) first discussed the concept of the sick role, wherein an individual must “agree” to be considered ill and to take actions to define the state of his or her health, discover a remedy, and do what is necessary to become well. Individuals who adopt the sick role neglect their usual duties, may indulge in dependent behaviors, and seek treatment to get well. By adopting the sick role, they are viewed as having “permission” to be exempted from usual obligations, but they are also under an obligation to try to restore health. There is a need to analyze the cultural explanations of disease causation. It is based on the literature and an attempt is to be made as comprehensive as possible for cultures around the world.

In the category of body balances, the concept of hot and cold is one of the most pervasive around the world. It is particularly important in Asian, Latin American, and Mediterranean cultures. Hot and cold beliefs are part of what is referred to as humoral medicine, which is thought to have derived from Greek, Arabic, and East Indian pre-Christian traditions (Foster 1953) and (Weller, 1983). This concept of opposites such as hot and cold, wet and dry also may have developed independently in Chinese medical tradition, where hot is referred to as yin, and cold as yang (Topley 1976). In

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the hot and cold belief system, a healthy body is seen as in balance between the two. Illness may be brought on by violating the balance, such as washing the hair too soon after childbirthcold may enter the body, which is still hot from the birth, eating hot/heavy foods at night, and breastfeeding will upset the baby and make the baby ill. It should be noted that hot does not always refer to temperature. Often foods such as beef and pork are classified as hot regardless of temperature, whereas fish may be seen as cold regardless of temperature. When illness has been diagnosed, the system is used to attempt to restore balance. Thus, in Central America some diarrheas in children are viewed as hot, and protein-rich “hot” foods such as meats are withheld, aggravating the malnutrition that may be present and may be exacerbated by the diarrheal disease (Scrimshaw and Hurtado 1988)11. Extensive literature exists on the topic of hot and cold illness classifications and treatments for many of the world’s cultures.

Energy balance is particularly important in Chinese medicine, where it is referred to as chi, when the balance is disturbed; there are internal problems of homeostasis. Foods and acupuncture are among the strategies used to restore balance (Topley 1976)12. Blood beliefs include the concept that blood is irreplaceable and that loss of blood, even small amounts, is a major risk. Adams (1955)13 describes a


nutritional research project in a Guatemalan village where this belief inhibited the researcher’s ability to obtain blood samples until the phlebotomists were instructed to draw as little blood as possible. Also, villagers were told that the blood would be examined to see if it was “sick” or “well” (another belief about blood) and they would be informed and given medicines if it was sick, which in fact did occur.

Menstrual blood is regarded as dangerous, especially to men, in many cultures, and elaborate precautions are taken to avoid contamination (Buckley and Gottlieb 1988). As with the Guatemalan example, blood may have many properties that both diagnose and explain illness. Bad blood is seen as causing scabies in south India (Beals 1976). Haitians have a particularly elaborate blood belief system, which includes concepts such as mauvais sang literally, bad blood, which is when blood rises in the body and is dirty, saisissement rapid heartbeat and cool blood, due to trauma, and faiblesses too little blood. Blood may also be seen as opposites, such as clean/unclean, sweet/normal, bitter/normal, high/normal, heavy/ weak, clotted/thin, and quiet turbulent. It is necessary to see how these concepts could be used in the prevention of disease and illness in a community, since every culture has its own ways of describing the problem.


Many cultures associate illness with problems in specific organs. Good and Good (1981) talk about the importance of the heart for both Chinese and Iranian cultures. They discuss a case in which problems with cardiac medication were wrongly diagnosed for a Chinese woman who kept complaining about pain in her heart. In fact, she was referring to her grief over the loss of her son. These are said to refer to mental and emotional problems, and thus are idiomatic rather than literal (O’Connor 1995). Topley (1976) mentions incompatibility of horoscopes between mother and child as appearing in Chinese explanations for some children’s illnesses.

Illnesses of emotional origin are important in many cultures. Sorrow, as in the case of the Chinese woman mentioned earlier, envy, fright, and stress are seen as causing illnesses. In a Bolivian village in 1965, a young girl’s smallpox infection was attributed to her sorrow over the death of her father. Envy is believed to cause illness because people with envy could cast the evil eye on someone they envied, even unwittingly, or the envious person could become ill from the emotion (Reichel-Dolmatoff and Reichel-Dolmatoff 1961).


Vectors or organisms are blamed for illness in some cultures and represent a blend of Western biomedical and indigenous concepts. “Germs” is a catchall category, as is “parasites.” Worms are seen as causing diarrhea, whereas flies are seen as causing illness and carrying germs. The supernatural belief is another frequently viewed source of illness. In fact, the evil eye is a widespread concept, in which someone can deliberately or unwittingly bring on illness by looking at someone with envy, malice, or too hot a gaze. In cultures where most people have dark eyes, strangers with light eyes are seen as dangerous. In Latin America, a light-eyed person who admires a child can risk bringing evil eye to that child, but can counter it by touching the child. In other cultures, touching the child can be unlucky, so it is important to learn about local customs. Frequently, amulets and other protective devices, such as small eyes of glass, red hats, and a red string around the wrist/waist are worn to prevent the evil eye. These objects can be viewed as an opportunity to discuss preventive health measures, because they are an indication that people are thinking about prevention.

Bewitching is deliberate malice, either done by the individual who wishes someone ill (literally) or by a practitioner at someone else’s request. Bewitching can be countered by another practitioner or by specific measures taken by an individual. In some regions of Africa, epidemics are blamed on “too many witches,” and people disperse to get away from them, thus reducing the critical population density that had sustained the epidemic (Alland 1970)\(^20\). Belief in soul loss is widespread throughout

the world. Soul loss can be caused by things such as fright, bewitching, the evil eye, and demons. It can occur in adults and children. Soul loss is serious and can lead to death. It must be treated through rituals to retrieve the soul. In Bolivia, a village priest complained that his attempt to visit a sick child was thwarted when the family would not allow him to enter the house. The family later reported that an indigenous healer was performing a curing ritual at the time, and the soul was flying around the house as they were trying to persuade it to reenter the child. Opening the door to the priest would have allowed the soul to escape. The child’s symptoms were those of severe malnutrition. Spirit possession is also a worldwide concept and is found frequently in African and Asian cultures.

Writing about a village in South India, Beals (1976)\textsuperscript{21} mentions spirit possession in a daughter-in-law whose symptoms were refusing to work and speaking insultingly to her mother-in-law. He suggests that spirit possession is a “culturally sanctioned means of psychological release for oppressed daughters-in-law” Freed and Freed (1967)\textsuperscript{22} discuss similar cases in other parts of India. In Haiti, spirit possession is seen as a mark of favor by the spirits and is sought. One of the drawbacks, however, is that the possessing spirits object to the presence of foreign objects in the body, so some women do not want to use intrauterine devices.


Demons are viewed as causing illness in Chinese culture, whereas offending God or Gods is a problem in others. In South India, epidemic diseases such as chickenpox and cholera and, formerly, smallpox are believed to be caused by disease goddesses. They bring the diseases to punish communities that become sinful. The concept of punishment from God is seen in a case study from Mexico, where on chocerciasis (river blindness), which is caused by a parasite transmitted by the bite of a fly that lives near streams, is often thought to be due to sins committed either by the victim or relatives of the victim. These transgressions against God are punished by God closing the victim’s eyes (Gwaltney 1970).23

Food can cause illness through its role in the hot and cold belief system, through spoiled foods, dirty foods, raw foods, and combining the wrong foods. Sweets are implicated as a cause of worms in children, and children who eat mud or dirt may get ill. Foods may also cause problems if eaten at the wrong time of day, such as “heavy” foods at night. There is an extensive literature on food beliefs and practices worldwide, which have important implications for public health practice.

In Ecuador in the early 1970s, children’s illnesses were sometime blamed on affairs between one of the child’s parents and a compadre or comadre- one of the child’s godparents (Scrimshaw 1974).24 Such a relationship was viewed as incestuous and dangerous to the child. In India, sex is sometimes viewed as weakening to the man, so overindulgence is considered a cause of weakness. To return to the concept of


blood beliefs, it is thought that 30 drops of blood are needed to make one drop of semen, thus weakening a man.

Heredity is sometimes blamed for illness, early death, or some types of death. Similarly, old age may be the simple explanation given for illness or death. The way in which some of these beliefs are used to explain a particular illness, diarrheal disease in Central America, it is typical of the way in which an illness may be seen as having different forms, or manifestations, with different etiologies. It is also typical of the way in which several different explanations may be used for one set of symptoms.

In this case, as presented in Figure 1, the diagram of treatments was the key in expanding the orientation of the Central American diarrheal disease program. The program intended to focus on the distribution of oral rehydration solutions (ORS) in the clinics, but the insider perception was that you usually only take a child to the clinic for the worst form of diarrhea, dysentery. Instead, the most common treatment consisted of fluids in the form of herbal teas or sodas with medicines added. Often, storekeepers and pharmacists were consulted. It made sense to provide the ORS at stores and pharmacies as well as at clinics, so that all diarrheas were more likely to be treated (Scrimshaw and Hurtado 1988)\textsuperscript{25}.

In a related situation, Kendall \textit{et al.} (1983)\textsuperscript{26} found that when the government of Honduras did not include indigenous or folk terminology for diarrheal disease in their


mass media messages regarding oral rehydration, people did not use ORS for diarrheas attributed to indigenously defined causes


Pluralistic healers are those who mix the two traditions, although some western biomedical healers and those from other medical systems may also mix traditions in their practices. As with the types of explanations of disease, the types of healers listed here are found in different combinations in different cultures. There is always more than one type of healer available to a community, even if members have to travel to seek care. The 16-country study of health-seeking behavior described earlier found
that in all communities people used more than one healing tradition, and usually more than one type of healer (Scrimshaw 1992). The processes of diagnosing illness and seeking a cure have been referred to as patterns of resort rather than the older term hierarchy of resort (Scrimshaw and Hurtado 1987). This is because people may zigzag from one practitioner to another; crossing from type to type of healer and not always starting with the simplest and cheapest, but with the one they can best afford and who they feel will be most effective given the severity of the problem. Even middle and upper-class individuals, who can afford Western biomedical care, may also use other types of practitioners and practices.

Indigenous practitioners are usually of the culture and follow traditional practices. Today they often mix elements of western biomedicine and other traditional systems. In many instances, they are called to their profession through dreams, omens, or an illness, which usually can only be cured by their agreement to become a practitioner. Most learn through apprenticeship to other healers, but some are taught by dreams. Often they will take courses in western practices in programs such as those developed to train “barefoot doctors” or community-based health promoters.

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In some instances, they must conceal their role as traditional healer from those running the training programs. The incorporation of some western biomedical knowledge and skills often enhances a practitioner’s prestige in the community. Some indigenous practitioners charge for their services, but many do not, accepting gifts instead. In a few traditions including some Chinese, practitioners are paid as long as family members are well, but they are not paid for illness treatment. The duty of the practitioner in those cases is to keep people well, which argues for the acceptability of prevention programs in those cultures.

For the most part, indigenous practitioners do “good,” or healing. Some can do both good and ill for example, shamans, sorcerers, and witches in many cultures. A few practice only evil or negative rituals (some shamans, sorcerers, and witches), their work must then be countered by someone who does “good” magic. The power of belief is such that if individuals believe they have been bewitched, they may need a counteractive ritual, even if the western biomedical system detects and treats a specific disease. The importance of the power of belief is not confined to bewitching. One anthropologist working with a Haitian population discovered that a Haitian burn patient made no progress until she went to a Houngan (voodoo priest) on the patient’s behalf and had the appropriate healing ritual conducted.

In some cultures healers are seen as diagnosticians, while others do the treatment. Other healers may do both, but refer some kinds of illness to other practitioners. In Haiti, both midwives and voodoo priests refer some cases to the western biomedical system. Healers who combine healing practices or who combine the ability to diagnose and to treat are viewed as more powerful than other types.
Ajzen and Fishbein (1972) discuss this for Hong Kong and notes that Taoist priest healers are particularly respected. They are seen as both priest and doctor and “claim to combine the ethics of Confucianism, the hygiene and meditation of Taoism, and the prayers and self-cultivation of the Buddhist monk.”

Pluralistic healers combine western biomedical and indigenous practices. Injectionists will give an injection of antibiotics, vitamins, or other drugs purchased at pharmacies or stores. Sometimes these injections are suggested by the pharmacist or storekeeper; other times they are self-prescribed. Because antibiotics were so dramatic in curing infections when western biomedicine was first introduced in many cultures, injections are seen as conveying greater healing than the same substance taken orally. Thus, many antibiotics now available orally and vitamins are injected. In today’s environment this increases the risk of contracting HIV or hepatitis if sterile or new needles and syringes are not used.

Traditional chemists and herbalists, as well as storekeepers and vendors in many communities are too small to have a pharmacy, sell western biomedical medications, including those that require a prescription in the United States and Western Europe. Although prescriptions may be legally required in many countries, the laws are not rigorously enforced. This is also true of pharmacies, which are very important, sometimes the most important, sources of diagnosis and treatment in many communities around the world.

Western biomedical practitioners are an important source of care, but they may also be expensive or hard to access from remote areas. As mentioned earlier, if an individual believes that an illness is due to a cause explained by the indigenous system and a western biomedical practitioner denies that cause, the individual may not return to that practitioner but seek help elsewhere.

As noted, there are other medical systems with long traditions, systematic ways of training practitioners, and well-established diagnostic and treatment procedures. Until recently western biomedical practitioners totally rejected both these and indigenous systems, often failing to recognize how many practices and medicines in Western biomedicine were derived from other systems. Elements of these systems that were derided in the past, such as acupuncture, have now found their way into western biomedical practice and are being legitimized by western research.

The fields of sociology, psychology, and anthropology have developed many theories to explain health beliefs and behaviors and behavior change. Some theories developed by sociologists and psychologists in the United States were developed first for U.S. populations and only later applied internationally. Others were developed with international and multicultural populations in mind from the beginning. Only a few of the many theories of health and illness beliefs and behavior are discussed here, but they are the ones that have been quite influential in general or that are applicable for international work in particular.

The health belief model suggests that decision making about health behaviors is influenced by four basic premises—perceived susceptibility to the illness, perceived severity of the illness, perceived benefits of the prevention behavior, and perceived
barriers to that behavior—as well as other variables, such as socio-demographic factors (Rosenstock et al., 1974). In general, people are seen as weighing perceived susceptibility in terms of how likely they are to get the disease and perceived severity in terms of how serious the disease is against their belief in the benefits and effectiveness of the prevention behavior they must undertake and the costs of that behavior in terms of barriers such as time, money, and aggravation. The more serious the disease is believed to be, and the more effective the prevention, the more likely people are to incur the costs of engaging in the prevention behavior.

This model has been extensively studied, critiqued, modified, and expanded to explain people’s responses to symptoms and compliance with health care regimens for diagnosed illnesses. One concern has been that this model does not work well for chronic problems or habitual behaviors because people learn to manage their behaviors or the health care system. Also, it has been accused of failing to take environmental and social forces into account, which in turn increases the potential for blaming the individual. The difficulty in quantifying the model for research and evaluation purposes is also a problem.

Work by Bandura led to the inclusion of self-efficacy in the model. Self-efficacy has been defined as “the conviction that one can successfully execute the behavior required to produce the desired outcome” (Bandura 1989). The concept of locus of control, or belief in the ability to control one’s life, also has been used with

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this model. In one example, a comparison of migrant Yugoslavian and Swedish diabetic females revealed stronger locus of control in the Swedes and more passivity toward self-care in the Yugoslavs, who also had a lower self-efficacy that the authors attributed to the different political systems in the two countries—collectivism in Yugoslavia and individualism in Sweden (Hjelm et al., 1999)\(^\text{32}\).

The value of the four basic premises of the health belief model has held up well under scrutiny. Perceived barriers have the strongest predictive value of the four dimensions, followed by perceived susceptibility and perceived benefits. Perceived susceptibility is most frequently associated with compliance with health screening exams. Perceived severity of risk has been noted to have a weaker predictive value for protective health behaviors, while it is strongly associated with sick-role behaviors.

In Medical Choice in a Mexican Village, Young (1981)\(^\text{33}\) describes a health decision-making process very similar to that found in the health belief model. In choosing between home remedies, pharmacy or store, indigenous healer or doctor, the villagers weigh the perceived severity of the illness, the potential efficacy of the cure to be sought, the cost in terms of money, time, and so on) of the cure, and their own resources to seek treatment and pay the cost as they make their decision. The simplest, least costly treatment is always the first choice, but the severity of illness and issues

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concerning efficacy may force a more costly option. Other studies of health-seeking behavior have found similar patterns throughout the world.

The theory of reasoned action was first proposed by (Ajzen and Fishbein 1972)\textsuperscript{34} to predict an individual’s intention to engage in a behavior in a specific time and place. The theory was intended to explain virtually all behaviors over which people have the ability to exert self-control. There are five basic constructs that precede the performance of a behavior. These are behavioral intent, attitudes, beliefs and evaluations of behavioral outcomes, subjective norms, and normative beliefs.

Behavioral intent is seen as the immediate predictor of behavior. Factors that influence behavioral choices are mediated through this variable. In order to maximize the predictive ability of an intention to perform a specific behavior, the measurement of the intent must closely reflect the measurement of the behavior. Thus, measurement of the intention to begin to take oral contraceptives must include questions about the date a woman plans to visit a clinic and which clinic she plans to attend. The failure to address action, target, context, and time in the measurement of behavioral intention will undermine the predictive value of the model.

In a recent test of this theory in the prediction of intentions regarding condom use in a national sample of young people in England, measures of past behavior were the best predictors of intentions and attenuated the effects of attitude and subjective

norms (Sutton et al., 1999). The diffusion of health innovations model proposes that communication is essential for social change, and that diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system (Rogers and Shoemaker 1972). An innovation is an idea, practice, service, or other object that is perceived as new by an individual or group. Ideally, the development of a diffusion strategy for a specific health behavior change goal will proceed through six stages:

- Recognition of a problem or need
- Performance of basic and applied research to address the specific problem
- Development of strategies and materials to put the innovative concept into a form that will meet the needs of the target population
- Commercialization of the innovation, which will involve production, marketing, and distribution efforts and diffusion and adoption of the innovation consequences associated with the adoption of the innovation.

According to classic diffusion theory, a population targeted by an intervention to promote acceptance of an innovation comprises six groups: innovators, early adopters, early majority, late majority, late adopters, and laggards. The rapidity and extent to which health innovations are adopted by a target population are mediated by a number of factors, including relative advantage, compatibility, complexity, communicability, observability, trial ability, cost-efficiency, time, commitment, risk

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and uncertainty, reversibility, modifiability, and emergence. Relative advantage refers to the extent to which a health innovation is better in terms of faster, cheaper, and more beneficial than an existing behavior or practice. Antibiotics were quickly accepted in most of the world because they were dramatically faster and more effective than traditional practices.

Compatibility is the degree to which the innovation is congruent with the target population’s existing set of practices and values. (Polgar and Marshall. 1976). 37 points out those injectable contraceptives were acceptable in the village in India where Marshall worked because injections were viewed so positively due to the success of antibiotics. The degree to which an innovation is easy to incorporate into existing health regimens may also affect rates of diffusion. Iodized salt is an easier way to ensure people are receiving iodine than taking an iodine pill, because using salt is already a habit. Health innovations are also more likely to be adopted quickly and by larger numbers of individuals if the innovation itself can be easily communicated.

The concept of trialability involves the ease of trying out a new behavior. For example, it is easier to try a condom than to be fitted for a diaphragm. Observability refers to role models, such as village leaders volunteering to be the first in a vaccination campaign. A health innovation is also more likely to be adopted if it is seen as cost-efficient. A famous case study of water boiling in a Peruvian town demonstrated that the cost in time and energy of gathering wood and making a fire to

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boil the water far outweighed any perceived benefits, so water boiling was seldom adopted (Wellin 1955). Successful health innovations are likely to be those that do not require expenditure of much additional time, energy, or other resources.

One of the overall messages regarding communication for the purposes of health education and promotion is that mass media and interpersonal communication channels should be used in conjunction (Rogers 1973). Implementing both methods is of particular importance in developing countries, especially in rural communities. Rogers emphasizes that mass media deliver information to a large population to add knowledge, although interpersonal contacts are needed to persuade people to adopt new behaviors thereby using the knowledge function, the persuasion function, and the innovation-decision process. According to Rogers’s work and other works cited by him, “family planning diffusion is almost entirely via interpersonal channels”. He presented five examples in different countries, including India, Taiwan, and Hong Kong, in which interpersonal channels were the primary source for family planning information and were the motivating factors for seeking services.

The Precede model of health promotion was first proposed by Green, Kreuter, Deeds, and Partridge in 1980. Proceed is an acronym for “predisposing, reinforcing, and enabling causes in educational diagnosis and evaluation.” This model focuses on communities rather than individuals as the primary units of change. This approach incorporates specific recommendations for evaluating the effectiveness of

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interventions and provides a highly focused target for the intervention. The framework of the Precede model outlines progression through seven phases. Phase 1, also known as social diagnosis, relies on assessment of the general problems of concern that have a negative impact on overall quality of life for members of the target population. Those populations might include patients, health care providers, family caregivers, lay health workers, or consumers of health care. During phase 1 there is an emphasis on identification of social problems encountered by the target population. This provides an important opportunity to involve the community. Community participation and acceptance of programs greatly increase their likelihood of success.

Phase 2 focuses on epidemiologic diagnosis. Activities associated with phase 3 focus on the identification of nonbehavioral (and often nonmodifiable) causes and behavioral causes of the priority health problem. Phase 4 of the model is identified as educational diagnosis and consists of activities to identify predisposing, reinforcing, and enabling factors associated with the target health behavior. At phase 5 intervention planners must decide which of the factors are to be addressed by various aspects of the intervention. Phase 6 is administrative diagnosis and refers to the development and implementation of the intervention program. Viable intervention strategies suggested by Green et al., (1980)\textsuperscript{40} include group lectures, individual instruction, mass media messages, audiovisual aids, programmed learning, educational television, skill development workshops, simulations, role playing, educational games, peer group discussions, behavior modification, modeling, and community development. The

seventh and final phase is focused on evaluation, which begins during each of the preceding six phases and ranges from simple process evaluation to impact and outcome evaluation.

Theories concerning the concept of stages of change have been evolving since the early 1950s. Currently the most widely accepted stage change model is the transtheoretical model of behavior change developed by Prochaska et al., (1992), which is described as a process of change that involves several steps. This model has four core constructs: (1) stages of change, (2) decisional balance, (3) self-efficacy, and (4) processes of change. Interventions relying on this model are expected to include all four constructs in the development of strategies to communicate, promote, and maintain behavior change.

The stages of change include several steps. The first is precontemplation, in which individuals have no intention to take action within the next 6 months. The contemplation stage refers to expressing an intention to take some action to change a negative health behavior or adopt a positive one within the next 6 months. The preparation stage refers to the intent to make a change within the next 30 days. The action stage is defined as the demonstration of an overt behavior change for an interval of less than six months. In the fifth stage, maintenance, a person will have sustained a change for at least 6 months. Decisional balance is an assessment of the costs and benefits of changing, which will vary with the stage of change. Self-efficacy is divided into two concepts. The first is confidence that one can engage in the new behavior. Second, the temptation aspect of self-efficacy refers to factors that can tempt one to

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engage in unhealthy behaviors across different settings. The fourth construct of the transtheoretical model deals with the process of change.

Knowledge, attitudes and practices (KAP) surveys are possibly the most frequently used studies in health-seeking behaviour research. Knowledge is usually assessed in order to see how far community knowledge corresponds to biomedical concepts. Typical questions include knowledge about causes and symptoms of the illness under study. People reported knowledge which deviates from biomedical concepts is usually termed ‘beliefs’ (Good 1994). This distinction between ‘knowledge’ and ‘beliefs’ markedly deviates from the use of terms in psycho-social theory where ‘beliefs’ have a much broader meaning and include also beliefs concerning perceptions about one.

Attitudes form a more complicated issue, and in fact, despite their explicit inclusion in the study type, they are scarcely accounted for in KAP surveys. Attitude has been defined by (Ribeaux and Poppleton1978). As “a learned predisposition to think, feel and act in a particular way towards a given object or class of objects”. As such, attitudes result from a complex interaction of beliefs, feelings, and values. They are important in designing health promotion campaigns which aim to change attitudes, for example attitudes towards condom use for prevention of AIDS. Attitudes may be inferred from a variety of statements and answers, but direct asking is usually problematic since people often respond in terms of what they think is the ‘correct’

answer. In particular attitudes towards traditional medicine might be hidden. In a survey, attitudes are therefore not easy to obtain. However, attitudes are central to understand behaviour, an element which is better acknowledged in cognitive models.

Above all, KAP surveys yield highly descriptive data, without providing an explanation for why people do what they do. Unfortunately, many investigators who use KAP studies do use them, implicitly or explicitly, to explain health-seeking behaviour. Their studies are based on the underlying assumption that there is a direct relationship between knowledge and action. They assume that by changing knowledge, behaviour is automatically changed as well. To give an example, one might expect that if people recognise the signs and symptoms of let’s say tuberculosis and if they know that TB can be treated by antibiotic drug regimens, they will act accordingly and attend a health facility. That this is overtly over-simplistic becomes clear if one considers that there are many other factors which influence health-seeking behaviour. Although knowledge about an illness may be high, illness recognition during an actual episode is much less clear.

The Health Belief Model (HBM) is possibly the most known model in public health, and also the oldest one from social psychology, developed in the 1950s. Figure shows the HBM as presented by (Sheeran and Abraham (1995)\textsuperscript{44}. According to this version, action in the HBM is guided by beliefs about the impact of illness and its consequences in terms of threat perception which depend on perceived susceptibility, or the beliefs about how vulnerable a person considers himself or herself in relation to

a certain illness or health problem; perceived severity of illness or health problems and its consequences; health motivation, or readiness to be concerned about health matters; Beliefs about the consequences of health practices and about the possibilities and the effort to put them into practice.

The behavioural evaluation depends on perceived benefits of preventive or therapeutic health practices; perceived barriers, both material and psychological (for example ‘will-power’), with regard to a certain health practice; (4) cues to action, which includes different, internal and external factors, which influence action. Beliefs and health motivation are conditioned by socio-demographic variables such as class, age, gender, religion, etc. and by the psychological characteristics of the interviewed person in terms of personality, peer group pressure, etc.

Figure 2: The Health Belief Model, Sheeran and Abraham, 1995.

The socio-demographic variables, as in all other models, target groups to be established to which interventions can be directed. These interventions are mainly
health promotion and centre on beliefs about disease threat and behavioural evaluation. These are the factors which are considered to be transformable through health education, in contrast to structural or cultural factors like poverty, religious norms, etc. While there is evidence that perceived susceptibility, severity, benefits and barriers of the HBM are relevant factors in health behaviour, the HBM neglects further determinants which are present in other models, like previous experiences, advantages of mal-adaptive behaviour, behavioural intention, perceived control, etc.

Through the HBM interesting and highly relevant findings for health promotion can be determined. For example, for a disease like tuberculosis or AIDS which is associated with a specific group of persons who do not include themselves into these groups will hardly consider them vulnerable to the disease. This had particular implications for health messages about AIDS, which in later campaigns needed to be explicitly targeted to heterosexuals in order to create risk awareness. Studies which found that in endemic areas, malaria was not considered a severe disease (Mwenesi, 1993)\(^\text{45}\), or that mosquito-nets were not felt effective against malaria because ‘mosquitoes bite day and night’, are other examples which show the implications of perceived threat for health behaviour. The same applies to diarrhoea which was locally understood as a way of ‘cleansing’ the body, and vomiting, perceived to be a sign of relief, rather than of aggravation of disease (Hausmann-Muela et al. 2002)\(^\text{46}\) and (Nyamongo 2000)\(^\text{47}\)


Figure 3: Theory of Planned Behaviour, following Conner and Sparks, 1995. In the TPB, Behavioural Intention is determined by:

They centre on factors which lead to a specific intention to act, or Behavioural Intention, which the TPB situates between the attitudes and behaviour. The centrality of Behavioural Intention questions the classical model of Belief, Attitude, and Behaviour (Conner and Sparks, 1995). An attitude towards behaviour is determined by the belief that a specific behaviour will have a concrete consequence and the evaluation or valorisation of this consequence. Subjective norms are the belief in whether other relevant persons will approve one’s behaviour, plus the personal motivation to fulfill with the expectations of others. Perceived behavioural control is determined by the belief about access to the resources needed in order to act.


successfully, plus the perceived success of these resources such as information, abilities, skills, dependence or independence from others, barriers, opportunities, etc. Socio-demographic variables and personality traits which condition attitudes, subjective norms and perceived behavioural control are the same as in the HBM.

The socio-behavioural or Andersen model (Andersen and Newman 1975)\(^{49}\) groups in logic sequence three clusters or categories of factors in terms of predisposing, enabling and need factors which can influence health behaviour. The model was specifically developed to investigate the use of biomedical health services. Later versions have extended the model to include other health care sectors, i.e. traditional medicine and domestic treatments (Weller \textit{et al.} 1997)\(^{50}\). Figure 3 outlines the different categories. An adaptation of the model has been proposed for studying health-seeking behaviour for malaria (Rauyajin 1991)\(^{51}\).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{healthcare_utilization_model.png}
\caption{Health Care Utilization Model}
\end{figure}

\begin{itemize}


\item \textsuperscript{51} Rauyajin, O. (1991) \textit{“Factors affecting malaria related behaviour: A literature review of behavioural theories and relevant research, in Social and Economic Aspects of Malaria Control”} (Sornmani, S. and Fungladda, W. eds.).
\end{itemize}
Examples of the factors organised in the categories of the Health Care Utilisation Model are: Predisposing factors: age, gender, religion, global health assessment; treatment actions: home remedies v12 herbal, pharmaceuticals, pharmacy, over the counter drugs from shops, injectionists, traditional healers, private medical facilities, public health services, etc.; prior experiences with illness, formal education, general attitudes towards health services, knowledge about the illness, etc. enabling factors: availability of services, financial resources to purchase services, health insurance, social network support, etc.; need factors: perception of severity, total number of sick days for a reported illness, total number of days in bed, days missed from work or school, help from outside for caring, etc.

The model centers specifically on treatment selection. It includes both material and structural factors, which are barely taken into account in the social psychology models. Weller et al., (1997)\(^52\) emphasised its particular use for working with statistical data on actual cases. The model has also been used for gaining evidence on the weight of different factors for health service use. Based on the data of Demographic and Health Surveys, a comparative study of six African countries has been carried out, using the categories proposed by Andersen (Fosu1994)\(^53\).


Andersen’s model has been modified in the International Collaborative Study on Health Care (Kroeger 1983)\textsuperscript{54}. In addition to the predisposing factors and enabling factors, this version includes Health Service System factors, referring to the structure of the health care system and its link to a country’s social and political macro-system. This is a valuable extension as it puts emphasis on the link of health-seeking behaviour with structural levels within a macro-political and economic context. However, the model omits the ‘need factors’ which are central for understanding health-seeking behaviour.

A further variant of Andersen’s model was elaborated, and based on an extensive and well-elaborated literature revision, he proposed the following framework (figure 5): Interrelated explanatory variables, all of which are affected by perceived morbidity; an individual’s traits or predisposing factors: age, sex, marital status, status in the household, household size, ethnic group, degree of cultural adaptation, formal education, occupation, assets such as land, livestock and cash, income, and social network interactions.

Characteristics of the disorder and their perception: chronic or acute, severe or trivial, aetiological model, expected benefits or treatment (modern versus traditional), psychosomatic versus somatic disorders. Characteristics of the service in terms of health service system factors and enabling factors: accessibility, appeal through opinions and attitudes towards traditional and modern healers, acceptability, quality,

communication, and costs. The interaction of these factors guides the election of health care resources (dependent variables).

![Figure 5: Kroeger’s Model, 1983.](image)

The advantage of socio-behavioural models is the variety of the factors which are organised in categories, making interventions on therapeutic actions feasible. They permit the establishment of correlations with good predictability, but not specification of how and why the different factors affect therapeutic selection.
Statement of the Problem

The discussions on culture, health beliefs, health behavior and the health behavior models highlight the role of cultural beliefs in health related matters. In order to examine the relationship between various aspects of health status and health related behaviors the researcher has taken up the present study to examine the impact of culture on health and disease in the Kancheepuram District, Tamilnadu, India. The major objective of the study is to examine the health status of the rural people. Also the researcher does focus on the health beliefs of people and their health practices relating to illness and diseases. The result of the study will help the researcher to appreciate how for culture influence the people to have certain health related belief and practices in the study region.