

**MODERN AND ISLAMIC MEDICINE: SOME IMPLICATIONS FOR
TRAINING HEALTH CARE PROFESSIONALS IN KUWAIT.**

by

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I declare that "Modern and Islamic Medicine: Some implications for training health care professionals in Kuwait" is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

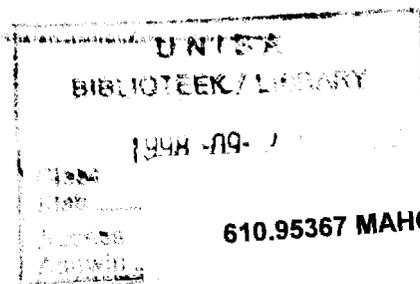
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A NOTE ON THE BIBLIOGRAPHY AND SYSTEM OF DOCUMENTATION

The system of documentation as used in this thesis is the Harvard method (Burger, 1992:21-75), adapted in certain respects to meet the special requirements of much of the source material.

SUMMARY

MODERN AND ISLAMIC MEDICINE: SOME IMPLICATIONS FOR TRAINING HEALTH CARE PROFESSIONALS IN KUWAIT

The historical roots of traditional and modern Western medicine have been the same, but during the past century these systems have diverged modern medicine has become dominant, replacing traditional systems in much of the world and denigrating them as quackery. In recent years there has been a resurgence of interest in traditional systems, with a remarkable change in attitude among health care professionals in many parts of the world. There is an increasing emphasis upon the importance of health care providers familiarizing themselves with specific culture-bound syndromes and their manifestations, in order to provide quality care to culturally diverse clients seeking health care services. Thus, there is a need for a complementary relationship between traditional healing practices and modern medicine in the world, reflecting the importance of respect for cultural diversity in health planning. The research problem assumes a relation between three distinctive dimensions of reality, namely, the industrial mentality, culture, and education. These dimensions will be discussed according to the relation-axes model introduced by Wielemans and Chan (1992:19), which investigates the complexity of relationships between man and himself, man and fellowmen, man and nature, and man and the transcendental. In Kuwait the traditional healing practices will be examined according to Islamic medicine and its contribution to health care. A comparison of modern and Islamic medicine is formulated and recommendations are made for the training health care professionals in Kuwait.

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CHAPTER ONE

MODERN AND ISLAMIC MEDICINE: SOME IMPLICATIONS FOR TRAINING HEALTH CARE PROFESSIONALS IN KUWAIT

1. INTRODUCTION

1.1 Introductory Orientation

Capra (1982:1), in his book, *The Turning Point: Science, Society and the Rising Culture* states that: "At the beginning of the last two decades of our century, we find ourselves in a state of profound, world-wide crisis. It is a complex, multi-dimensional crisis whose facets touch every aspect of our lives, our health and livelihoods, the quality of our environment and our social relationships, our economy, technology, and politics." It is surely a crisis of intellectual, moral, and spiritual dimensions; a crisis of a scale and urgency unprecedented in recorded human history. For the first time we have to face the very real threat of extinction of the human race and of all life on this planet. This threat to the human race results from the many countries that have stockpiled tens of thousands of nuclear weapons which are enough to destroy the entire world several times over.

Thousands of tons of toxic materials have already been discharged into the environment by nuclear explosions and reactor spills. As they continue to accumulate in the air we breathe, the food we eat, and the water we drink, our risk of developing cancer and genetic diseases continues to increase. Concomitant with this collective nuclear madness, more than a hundred

countries, most of them in the Third World, are in the business of buying arms. In the meantime, more than fifteen million people, most of whom are children, die of starvation each year, while another 500 million are seriously undernourished. Almost forty percent of the world's population has no access to professional health services, yet developing countries spend more than three times as much on armaments as on health care. Thirty-five percent of humanity lacks safe drinking water, while half of its scientists and engineers are engaged in the technology of making weapons (Capra, 1982: 2-3).

Modern medicine, like modern science and technology, with its primary attention being given to "illness," "disability," and "dysfunction," has committed itself and our resources almost exclusively to remediating these problems. There is a growing body of research and related literature to support the concept that any society would do well to reassess its model for human development and well-being and as a provider of health care. Recent emphasis on health and well being, especially for life-threatening illnesses or diseases such as AIDS, cancer, rheumatoid arthritis, and psychosomatic illness related to social ills for which there is no cure for the moment, has led to the establishment of a new program to explore the possibility of traditional medicine functioning in conjunction with modern medicine to establish a holistic approach to patient care (Elling, 1981; Fulder, 1986; and Akerele, 1986).

Besides the primary attention to "illness," "disability," and "dysfunction," there is also a concept of health that is closely related to both individual and social value systems. While there may not be consensus about what constitutes good health, but there should be an understanding about the range of possible and likely goals and forces that may have an impact on them, such as the environment as an important determinant of individual well-being (Gage, 1983:35). In addition, it is essential to acknowledge cultural diversity in health planning when considering the role of a possible complementary relationship

between traditional healing concepts and practices with modern, science-based concepts in treating patients. Cultural diversity must be considered under the rubric of medical anthropology, which deals with how people in different cultures and social groups explain the cause of ill-health, the types of treatment they believe in, and to whom they turn to if they do become ill. It is also the study of how these beliefs and practices relate to biological and psychological changes in the human organism, both in health and disease (Helman, 1990:1). Before embarking on how different cultures understand the cause of ill-health, it is necessary to define "modernization" and the interpretations of the term Islamic medicine.

1.2 DEFINITION OF TERMS

1.2.1 Definition of the term "modernization"

According to Collins (1993), the word *modernization*, comes from the word, *modern*, which means "of present or recent times," "of current fashion," "person living in modern times," "modern tendencies, thoughts etc."; to modernize is "to bring up to date." Roget's International Thesaurus (1962), describes modern as "futurist," "neologist," "neoterist," "neoteric," "modern generation," "rising generation," and "modernize" as "streamline," "update," and "futurize." It is without doubt that when a nation changes its dress code, its way of thinking, its surroundings, its educational system, its living conditions, it becomes a transformed social system. This transformation may be regarded by some as "modernization," or rather keeping abreast of new developments. The question that should be posed is: What is modernization? Modernization is a cultural phenomenon that has been present from the moment man started to develop his culture and is especially evident when less developed communities came into contact with more developed communities (Khanyile,

1988:8). One of the major concerns of developing countries is to transform their traditional premodern societies into social organizations that characterize the “advanced” and economically prosperous nations of the Western world. Social scientists identify this process as *modernization* which is commonly approached in terms of economic growth stimulated by recent technology (Berger *et al*, 1973:8-9). Modernization is defined as “the institutional concomitants of technologically induced economic growth” (Berger *et al*, 1973:9) and technology is defined as “the organization of [scientific] knowledge for the achievement of practical purposes” (Mesthene, 1971:25). It is in these broader meanings that the author will reflect upon the extent and variety of the effects of technology on training of health care professionals of developing societies.

1.2.2 Definition of the term “medicine”

1.2.2.1 Traditional definition of “medicine”

Medicine is defined by the famous Muslim physicians Zakariyya Razi (Rhazes) (865-925 AD) and Ibn Sina (Avicenna) (980-1037 AD) as “the art which is concerned with the preservation of good health, combating of diseases, and the restoration of health to the sick” (Anees and Hamarneh, 1983. as quoted by Ghazizadeh, 1992:228).

1.2.2.2 Modern definition of the term “medicine”

Anderson *et al.* (1994:970) defines medicine as:

1. A drug or a remedy for illness.

2. The art and science of the diagnosis, treatment, and prevention of disease and the maintenance of good health.
3. The art or technique of treating disease without surgery.

Two major divisions of medicine are *academic medicine* and *clinical medicine*. Some of the many branches of medicine include *community medicine* (the practice of medicine or the study of health care services focusing on community needs and care rather than on the individual [Churchill, 1989:1118]), *family medicine*, *behavioral medicine* (the application of the principles of learning and learning theory to treat those disorders, caused at least in part by psychological factors, as if they were behaviors [Churchill, 1989:1118]), *psychosomatic medicine* (the study and treatment of diseases, disorders, or abnormal states in which psychological processes and reactions are believed to play a prominent role [Stedman, 1990:932]), *environmental medicine* (the study of the environmental aspects related to the etiology and prevention of disease, as well as specific environmental aspects of the promotion of good health [Churchill, 1989:1118]), *folk medicine* (the treatment of illness or injury based on tradition, especially an oral tradition passed from one generation to the next, rather than on scientific practice [Churchill, 1989:1118]), *holistic medicine* (an approach to health care based on the theory that health is the result of harmony between body, mind, and spirit, and that stress of any kind, including physical, psychological, and social pressure, is inimical to health. Also *whole person medicine* [Churchill, 1989:1119]), *domestic medicine* (the treatment of illness or injury in the home, without the advice or assistance of a physician), *dosimetric medicine* (the administration of drugs or medicine by an exact and standardized system of dosages [Churchill, 1989:1118]), *preventive medicine* (the branch of medicine concerned with the prevention of disease, injury, and disability, and with the promotion of safety and of practices aimed at lessening the probability of disease, with regard to individuals and whole populations, as distinguished from remedial or curative measures [Churchill, 1989:1119]), *space medicine* (a special branch

of aviation medicine which deals with the stresses imposed on man by projection through and beyond the earth's atmosphere, flight in interplanetary space, and return to earth. Such stresses include the agravic state, exposure to radiation, and isolation. This is also known as *aerospace medicine* [Churchill, 1989:1119]. Other types are; *internal medicine*, *physical medicine*, *forensic medicine* (the application of theoretical and practicable medical knowledge and skill to the solution of problems encountered in administration of justice). Also mention should be made of *legal medicine*, *medical jurisprudence* [Churchill, 1989:1118], and *clinical medicine* (medical practice or instruction involving and based on direct observation of patients as opposed to the theoretical study, laboratory investigations, or classroom teaching [Churchill, 1989:118]).

These branches of medicine are wide, some of which are important (for example, community medicine, behavioral medicine, psychosomatic medicine, environmental medicine, folk medicine, holistic medicine and domestic medicine) when reflecting on Modern and Islamic Medicine: some implications for training health care professionals in Kuwait.

1.2.3 Interpretation of the term "Islamic medicine"

Most people even among Muslims have difficulty in understanding what is Islamic Medicine? The author would like to alert the reader to the fact that the history of Islamic medicine is still imperfectly understood because of the vast amount of poorly edited and unpublished medical material in oriental languages that remains to be studied (Ibn Ridwan's Treatise, translated by Dols, 1984:ix). This thesis is a small contribution to that endeavor. The question addressed is: What is Islamic Medicine? In the literature reviewed by the author, there were many explanations for the term Islamic Medicine, some of these explanations are elaborated upon. Is Islamic Medicine natural medicine utilizing mostly

herbs, diets and lifestyle adjustments, like most traditional medicine? Is it a medical system limited to the health-related teachings found in the Qur'an and the Prophet Mohammed's (P.B.U.H.) tradition? Is it primarily faith-healing and prayers for the sick? Is it the old medicine still being practiced by some "*hakims*" (Muslim men of knowledge) in the East? Is it a medicine that offers spiritual dimensions of healing? Is it simply customary medicine given an Islamic label? Or is it some new discovery providing a cure for almost all ills, including the aspect of emotional factors that are involved in daily lives that may have an impact on health? The question is: Which one of the above is Islamic Medicine? The answer is all of the above, and a great deal more, are the ingredients of Islamic Medicine.

1.3 THE FACTORS THAT LED TO THIS STUDY

1.3.1 Need to define health and illness, and need to understand how people perceive their pain, and whether they communicate this pain to health care professionals

Definitions of what constitutes both "health" and "illness" vary between individuals, cultural groups and social classes. Some may see health as a balanced relationship between man and his environment. Any disturbance of this relationship may manifest itself by physical or emotional symptoms. It would be interesting to establish if there is a standardized way in which an ill person can draw attention to these abnormal changes to mobilize care and support. The presentation of illness, and others response to it, are largely determined by sociocultural factors. Each culture has its own language of distress, which bridges the gap between subjective experiences of impaired

well-being and social acknowledgment of them. It would be interesting to establish what are the social, moral, and psychological elements that many people associate with pain.

1.3.2 Reasons for the neglect of Islamic medical education in the training of health care professionals in Kuwait

Many reasons may be suggested for the neglect of Islamic medicine in the medical system of education in Kuwait. In the first instance, Islamic Education is not provided in the medical school system; but it is frequently identified with mostly primary schooling, and occasionally secondary schooling. The school is not the sole educational agency, and it is recognized that the family is the primary educational agency with the mosque sometimes playing an important role in the education of the individual. We must pose the following question: Is there no role that Islamic Medical Education can play at the tertiary level, especially as regards health care delivery and the training of the health care professionals? It is important to understand that Islam is primarily focused on law that is divine in origin. "For the Muslim, the essence of God is ...so unknowable, and the mind and will of man so frail, that the only good that man can arrive at is through God's command" (Forte, 1984:159). If this divine law is so important, then the absence of Islamic Medical Education from tertiary health care training should be questioned.

1.3.3 Need to review historical background of Islamic scholars

Works on medical education, and histories of medical education in particular, have until recently, tended to concentrate on the formal Western Medical Education System. As the school has come to be accepted as the main institution for formal education, it has also incorporated the Western concept of Modern education. The history of well known Islamic medical scholars reveals that their medical education did not focus only within the school walls and on the school grounds, they pursued knowledge in astronomy and medical education; they pursued their education by means of self-directed study in a form of extra-curricular activity, and consequently fell outside the scope of institutionalized education. Thus, it is essential to review historical Islamic medical scholars in the light of problems currently encountered by health care professionals.

1.3.4 Need to review modern medicine in terms of Islamic medicine

Islamic Medical Education cannot totally replace the Modern approach to health care delivery and may only put forward suggestions for alternatives to some of the practices. However, what may be required is the systematic incorporation of the holistic approach to patient care to overcome the shortcomings of the Modern Medical Education System and to make some proposals for a new formal educational edifice. To incorporate Islamic Medical Education only at the tertiary level is not feasible at all. It has to become a practical reality from the very beginning of a child's learning process, through childhood, and than adulthood and should continue through a person's life. It is important to ask how this may be achieved?

1.3.5 Need to offer answers to world problems related to health care

For the first time in human history, man faces the very real threat of extinction of the human race and all life on this planet as a result of the threat of nuclear weapons. With all the chaos and uncertainty in this world, science is directing us to new complex theories and transformation of education, together with the role of values (Badenhorst & Claasen, 1995:5). We are also reminded that complex systems, containing both order and chaos, are rich in information rather than poor in order (Hayles, 1991:6).

The contribution of Islamic education to solving current world problems related to presently incurable diseases is slowly gaining momentum if we read the educational journals or books or monographs which are directed at an academic audience. Islamic medical thought is embodied chiefly in the Qur'an and the *Hadith* (*Sunnah* of the Prophet). The Qur'an, according to Muslim beliefs, is the last revelation and Prophet Muhammad (P.B.U.H.) is a true prophet of Allah. Thus, it is incumbent on a Muslim to share this information with all who may wish to know it.

1.3.6 Need to evaluate the concept of "modernization"

From the above description of modernization (point 1.2.1) it would seem that a new culture related "modernization" has been and will be presented to the whole world. This would suggest that all people of the world should become uniformly alike, that they should live and think alike. This will most definitely affect the structural elements of the personality and the spirit of

man and his nation, which include his religion, history, culture, education, tradition, and, most of all his way of living. A question that could be posed is: To what extent is the concept of "modernization" having an influence on a developing country such as Kuwait? How may this be recognized as a threat and challenge to the traditions of the society and its health care institutions in Kuwait?

1.3.7 Need to evaluate the premature importation of Modern Tertiary-Care-Orientated approach to health care delivery system

Western Europe, and then the United States, have pioneered the transition, from traditional medicine to modern, science-based medicine, which has taken place over the last 150 years. Many developing countries began to modernize their medical education and health care delivery systems after gaining their independence after the Second World War. One such attempt to modernize medicine and medical education occurred in Kuwait at the Faculty of Medicine and at the Faculty of Allied Health Sciences and Nursing.

The process of modernization in medicine and the transition from traditional healing practices to modern, science-based medicine is complex and painful, and may be associated with unpredictable complications. With the best of intentions, developing countries sometimes attempt to import Western-type medical education and care systems, even though the nation may have other, more urgent health-related needs (such as safe water, better housing, and delivery of primary care). This is well explained by Ronaghy and Simon (1985:300) when they describe how nationals from developing countries are trained in the tertiary care systems of Western countries, and how they may attempt to transplant Western systems of medical education and health care delivery to their own countries, and superimpose them onto existing traditional

patterns. Thus, it is important to address what are the implications for premature importation of a tertiary-care-orientated approach to medical education and health care delivery in a developing country such as Kuwait?

1.3.8 Need to evaluate the process of “modernization”

The process of modernization is not only facilitated on the grounds of medical education, but also on the basis of political and economic interests. There are different reactions and responses to the new and unfamiliar forces of change and the process of modernization in Kuwaiti society. At one end of the spectrum there are those who support the idea that if Kuwait is going to adopt any of the fundamental educational structures of the "developed societies," it should go all the way and adopt its value system as well. At the other spectrum are the so called "conservative and reactionary" people of the society who say that whatever is foreign is undesirable and should be resisted implacably. Between these two extremes there is the moderate Kuwaiti who believes that to keep abreast of knowledge is a fundamental right; however, this does not mean that one has to sacrifice one's own values, traditions, and heritage for acknowledging growth in many directions. Perhaps, the new growth should demonstrate a unique character and identity within Kuwaiti society. It is important to establish which reaction and response is most likely to be pursued in the modernization process?

1.3.9 Need to reflect on the relationship between man and the transcendental

When reflecting on the past, it may be recognized that it is only during recent centuries in Western countries that a change from mainly religious-based principles to secular values which has brought about a profound crises in faith and a renewed search for meaning in life. Secularization is marked by the decline of the influence of religion on people's lives. Freedom of opinion and behavior is being advocated. The new emphasis is on science and on this world, rather than on the supernatural; the emphasis is on facts and effective behavior rather than on belief. The spiritual dimension is a difficult concept to understand because of its relation to the unknown. However, it is the author's intention to try and demonstrate the importance of the spiritual dimension in health care, which has been ignored in modern health care delivery and which is beginning to demonstrate its significance.

1.4 THE PURPOSE OF THE STUDY

The purpose of this study is to investigate and compare Modern and Islamic medicine, and from this deduce some implications for training of health care professionals in Kuwait. The undergraduate training of health care professionals in Kuwait is according to the models of modern medicine and the oath of a medical professional encompasses both modern medicine and Islamic philosophy. Modern medicine, like science and technology, are strong agents of Western influence over developing countries; and although these are beneficial to these countries, they are seen as a force that can undermine the structural elements of their society, which means their traditions, cultural values. practice of health care, and most of all, their religion.

1.5 SUBSIDIARY OBJECTIVES OF THIS RESEARCH

In view of the above, the researcher seeks to answer the following questions:

- 1.5.1. What are the points of agreement and differences between Islamic and modern medicine?
- 1.5.2. Is medical education a vehicle of modernization in a Third World country such as Kuwait?
- 1.5.3. By being exposed to modern medicine, are Kuwaitis likely to adopt the culture and value system of the West? Can Kuwaitis keep their traditional values, beliefs, patterns of life, and behaviors while using the modern medicine and technology of the West simultaneously?
- 1.5.4. Is there a place for Islamic medicine in the system of training of Health care professionals in Kuwait?
- 1.5.5. Does Islamic medicine have answers to questions prevailing in the practice of health care throughout the world for example, questions such as an approach to health care towards psychosomatic problems related to ever-increasing rates of divorce, wife-battering, cruelty to children, sexual abuse of children, disregard and disrespect towards the elderly, infidelity among married couples, feminism, homosexuality, lesbianism, AIDS, abortion, euthanasia, environmental pollution, drugs, cancer and most of all, the threat of nuclear war which is the greatest danger facing humanity and life on earth?

Placing the problem in perspective: How to investigate modern and Islamic medicine: some implications for training health care professionals in Kuwait?

1.6 THE AIM OF THE STUDY

1.6.1 What is the influence of modern medicine on the training of health care professionals in Kuwait?

1.6.2 What could be the influence of Islamic medicine on the training of health care professional in Kuwait?

It is important to understand that there is no easy solution to investigate this problem, but a systematic study in the following areas may provide the author sufficient ground to explore the problem.

1.7 THE STRATEGIES FOR EXPLORING THE PROBLEM

A search of the literature was carried out in the different dimensions of education to establish a theoretical basis for investigating modern and Islamic medicine: some implications for training health care professionals in Kuwait.

This research problem assumes a relation between three distinctive dimensions of reality, namely, the industrial mentality, culture, and education. These dimensions, according to Wielemans and Chan (1992:19), have embodied sets of values which have given human behavior different forms and shapes. Wielemans and Chan (1992:25) have introduced the relation-axes model which is used as a paradigm for understanding Man in his interrelatedness. This model will be used in this study which provides a framework to analyze the change of mentality in the three (or four) relation-axes of man and nature, man and fellowmen, man and self and man and the transcendental.

1.8 MOTIVATION FOR USING WIELEMANS AND CHAN'S MODEL

When trying to understand the influence of modern and Islamic medicine: some implications for training health care professionals in Kuwait and how this may influence the culture, values, and religion of a community; it is important to reflect on many dimensions of human reality. Since it is difficult to pursue a single method to understand the complex web of relations, Wielemans and Chan offers a model which according to the author provides a base of understanding man in his rather complicated web of relations; which include man and himself, man and fellowmen, man and nature and man and the transcendental. The author would like to alert the reader that her intentions are not to discuss pre-industrial, industrial and post-industrial mentality because the process of modernization in Kuwait has and still is moving with speed and intensity rarely found in other countries. Kuwait is a small country and it did not have the opportunity to go through pre-industrial, industrial and post-industrial stages gradually, as is the situation with most industrialized countries. Badenhorst (1979:iv) reminds us that his study rests on the assumption that a certain ground motive or ground motives operating against the background of natural and cultural factors are active in every community and that they play a determining role in the unfolding of the community's culture. In addition, he states: "Under normal circumstances the education system is embedded in the culture of the community. If, however, a community borrows its education system from another community the possibility exists of a hiatus coming into being between the culture and the education system and causing all manner of problems" (Badenhorst, 1979:iv). In his comparison of Zulu, Afrikaner, British and contemporary white ground motives, Badenhorst (1979:22-23) refers to the work of the anthropologist Keesing (1965:245) and the philosopher Dooyeweerd (1969:11) and states that he will look at the ground and secondary motives of the relevant communities in terms of three relationships, namely: (a) man's relationship to his temporary existence, (b) his

relationship to his fellowmen and (c) his relationship to the transcendental. Reflecting on this model and comparing it to Wielemans and Chan's model, it becomes clear that the latter provides an additional base for comparing cultures and its influence on values and religion.

Badenhorst (1996:1) reminds us that one of the major points of discussion in the post-modern debate is the question of truth. Western science has been concerned with the discovery of essentials or truths. Contradictions and paradoxes had to be eliminated. In contrast, Kosko (1994:24 as quoted by Badenhorst 1996:1-2) offers some key dual ideas and systems in human thought namely bivalence in contrast to multivalence. The bivalence (binary logic) incorporates the all or none view whereas the multivalent logic incorporates the continuum between 0 and 1 where every point of the continuum could have some degree of value. Since, the web of human relations according to the relation-axes model is a complex phenomenon, it would be of value to use a multivalent logic rather than binary logic in arguing the question under discussion.

1.9 THE METHODS USED IN THE STUDY

The theoretical background used to establish the basis for investigating Modern and Islamic Medicine: some implications for training health care professionals in Kuwait -was obtained from a study of the available literature. The author would like to remind the reader that it was difficult to find literature related specifically to this topic, therefore the literature encompasses many domains of education that envelop the training of health care professionals from medicine to social science, to current anthropology in medicine, to psychohistory, to ethnopharmacology, to the history of medicine, to biosocial science, to public health, to medical education, to health care in cross-cultural populations, to

social work, to creative behavior, to psychotherapy and psychosomatic, to mental health, to religious education, to language learning, to counseling and development, to cultural exchange, and the like.

In addition to the literature search on Modern and Islamic Medicine: some implications for training of health care professionals in Kuwait; Wielemans and Chan's (1992:19) relation-axes model related to the three distinctive dimensions of reality, namely, the industrial mentality, culture, and education which embodies sets of values that have given human behavior different forms and shape, will be discussed.

In the complex web of relationships, the "*Chaos/Complexity Theory and Fuzzy Logic: An escape from post-modernistic impasse?*" (Badenhorst, 1996:1-11) and "*Fuzzy Thinking: the new science of Fuzzy Logic*" (Kosko, 1994) will be considered in view of the bivalent and multivalent way of looking at phenomena.

Five prominent people in Kuwait are interviewed with regard to modern and Islamic medicine: some implications for training health care professionals in Kuwait. Their opinions will be discussed as additional information related to this research.

In addition, some implications of the current influence of modern and Islamic medicine on the training of health care professionals in Kuwait are obtained from the author's own experiences and involvement with the training of health care professionals in Kuwait, both in the hospital settings as well as the academic environment. The author acknowledges that the field of medicine is very wide, but this research will concentrate on her personal experience of teaching health care professionals who have English as a second language. She has experience in teaching physical therapy students at Medunsa for five years, at the

University of Witwatersrand for one year and at Kuwait University since the beginning of 1987. Her knowledge of modern medicine and Islamic medicine made her think particularly hard in trying to understand the modern secular educational system and its influence on the training of health care professionals in Kuwait.

1.10 LIMITATION OF THE STUDY

Many developing countries such as Kuwait have “hidden curriculum” analysis which has not been introduced or is in the early stage of investigation only. Examples that could be given are major issues in Kuwait which are discussed by males in their “*diwanias*” (a place where males congregate to discuss current problems in Kuwait) where females do not have access to this information.

As the author is not Arabic speaking, any Arabic literature on Islamic medicine would be considered a limitation, even with regard to translations. The author acknowledges that any translation from Arabic to English cannot render the translator independent of that intangible communion with the spirit of the language which can be achieved only by living with and in it.

1.11 THE STUDY PROGRAMME

In Chapter Two, health and illness in context with particular reference to the modern (Western) view of medicine and its implications for the system of training health care professionals are discussed. The modernization theory; the concept of acculturation, culture, cultural identity and core values; educational socialization

and core curriculum; and the relation-axes concerning man and himself, man and fellowmen, man and nature and man and the transcendental, will be discussed. Lastly, the author will reflect on the critique of modern medicine in terms of the delivery of health care and the training of health care professionals.

Chapter Three is concerned with health and illness in context with particular reference to the world of Islam and its implications for the system of training health care professionals in Kuwait. An introductory orientation to the State of Kuwait and the history of Kuwait are given to understand the impact of modern influences on the training of health care professionals. In addition, the importance of studying the Islamic heritage and the relation-axes model are discussed.

A comparison of the Islamic and modern views of medicine against the background of contemporary Arab society and some implications for the development of an appropriate system of professional health care training in Kuwait are discussed in Chapter Four. The interviews with five prominent people are discussed in this chapter.

The final chapter will deal with the recommendations, motivations and implications resulting from our study of the influence of modern and Islamic medicine: some implications for training health care professionals in Kuwait. The implications for the weaknesses and strengths found in the training of health care professionals in Kuwait will be discussed in view of the current challenges facing the health care professional.

CHAPTER TWO

HEALTH AND ILLNESS IN CONTEXT WITH PARTICULAR REFERENCE TO THE MODERN (WESTERN) VIEW OF MEDICINE AND ITS IMPLICATIONS FOR THE SYSTEM OF TRAINING HEALTH CARE PROFESSIONALS

2.1 INTRODUCTION

There is a historical pattern in the nature of challenges facing all humankind in our natural and social environments that are concerned with health and well being. Some of these challenges are connected with natural resources, others with cultural values and ideas, some are parts of periodic fluctuations, while others occur within patterns of rise-and-fall. Each of these processes has a distinct time span, or periodicity, but all of them involve periods of transition that happen to coincide at the present moment. Among these transitions are three “that will shake the very foundations of our lives” (Capra, 1982:10-11):

The first and perhaps most profound transition is due to the slow and reluctant, but inevitable decline of patriarchy. The power of patriarchy has been extremely difficult to understand because it is all-pervasive. It has influenced our most basic ideas about human nature and about our relation to the universe. It is the one system which, until recently, had never in recorded history been openly challenged, and whose doctrines were so universally accepted that they seemed to be laws of nature; indeed, they were usually presented as such. Today, the disintegration of patriarchy is occurring with the continuing expansion of the feminist movement, which is one of the strongest cultural currents of our time and will have a profound effect on our further evolution.

The second transition that will have a profound impact on our lives is forced upon us by the decline of the fossil fuel age. Fossil fuels, which include coal, oil, and natural gas, have been the principal sources of energy for the modern industrial era, and this era will slowly come to an end. It is estimated that fossil fuels will be exhausted by the year 2300; but the economic and political effects of this decline are already being felt (Capra, 1982:11). This decade will be marked by the transition from the fossil fuel age to a solar age, powered by renewable energy from the sun; a shift that will involve radical changes in our economic systems, including the health care systems and political systems.

The third transition is connected with **cultural values**. It involves what is now often called a “**paradigm shift**” - a profound change in the thoughts, perceptions, and values that form a particular vision of reality (Capra, 1982:11). The paradigm that is now shifting has dominated our culture for several hundred years, during which it has shaped our modern Western society and has significantly influenced the rest of the world. This paradigm comprises a number of **ideas and values that differ sharply from those of the olden times**; values that have been associated with “various streams of Western culture, among them the Scientific Revolution, the Enlightenment, and the Industrial Revolution. They include the belief in the **scientific method as the only valid approach to knowledge**; the view of the universe as a mechanical system composed of elementary material building blocks; the **view of life in society as a competitive struggle for existence**; and the **belief in unlimited material progress** to be achieved through economic and technological growth” (Capra, 1982:12). During the past decade or two all these ideas and values have been found severely limited and in need of radical revision but at the same time, the dominant social institutions refuse to relinquish their leading roles to any of the new cultural forces.

Stacey (1988:258) states in his book, *The Sociology of Health and Healing* "that the dominant system of health care of any society cannot be studied in isolation from other aspects of that society, because the 'medical system' or professional sector of **health care does not exist in a social or cultural vacuum**. In fact, it is an expression of and to some extent a miniature model of the values and social structure of the society from which it arises." Thus, different types of society depending on their dominant ideology - whether this is capitalist, socialist or communist - produce different types of medical systems, and different attitudes to health and illness. One society may see free (or relatively inexpensive) **health care as a basic right of citizenship**, or the basic right only of the very poor or the very old, while another may see **medical care as a commodity to be bought only by those who can afford it**. In the latter case, the pursuit of profits in health care will exclude many of the poorer members of society who do not have the resources to pay for it. Whatever the type of society, the medical system not only reflects these **basic values and ideologies**, but in turn helps also to shape and maintain them.

Thus, the introduction of modern medicine into developing societies is an important subject for social-scientific analysis. What are these "**carriers of modernity**" that exercise the thought processes of the researcher? Though it may seem an **unproblematic endeavor** to examine the place of health care in the modernization process, it points to a neglected question within the tradition of Western social thought. There is a concept of "**health rationality**" comparable to "**economic rationality**," the latter making up the socially structured motivation that led to major socioeconomic changes in the West (Gallagher, 1988b:59-60).

Western industrialized countries, especially through their colonialism, have had an enormous influence on developing countries. Will the importation of Western technology (related to medicine and health care) into developing countries like Kuwait also have an impact on the models of social organization in the

receiving country? To answer this question it is important to understand and explore the conceptual model of the relation-axes as it is introduced by Wielemans and Chan (1992:19-21) as a paradigm for understanding man in his rather complicated web of relations, especially in the sphere of medicine and health care. This theoretical approach will enable the author to operationalize the key-concepts of the research model and it will provide her with the base that will guide this study.

Since many **psychosomatic problems** are **related to cultural aspects of socialization**, for example, the need to marry and fulfill the role of mother and father, the need to conceive, the manner in which people conceptualize their pain, including labor pain, the essential aspects of engaging in daily critical decisions, like contraceptives, abortion, and infanticide, play an important role in social interactions. These specific aspects of life related to health and illness will be elaborated upon in this chapter to focus on some implications of the influence of modern medicine on the training of health care professionals in Kuwait.

2.2 THE RELATION-AXES MODEL

Wielemans and Chan (1992:19-21) have introduced the relation-axes as having a relation between three distinctive dimensions of reality, namely, the industrial mentality, culture, and education. These dimensions embody sets of values which have given them different forms and shaped their development and they can be identified in four relation-axes, namely, the relation of man with nature, with his fellowmen (and social institutions), with himself (psychosomatic), and finally the relation with the transcendental.

2.2.1 Industrialization and “Industrial Mentality”

According to Wielemans and Chan (1992:25), the definition of Western technological-industrial influences is embodied in the concept of industrialization. Industrialization is understood as an aspect of a more widespread process of modernization by which the dominant characteristics of the modern world are produced and realized. **Introducing industry** in a country means much more than mere automation or mechanization in industries where industrialization is being narrowed down to the externally perceptible results of a more **profound process**. This process can be interpreted as a change in mentality on each of the four mentioned relation-axes through the introduction of new knowledge, skills, attitudes, values and norms. It is **“presumed that these changes will inevitably affect the given meanings, the attitudes and behaviors of peoples and their indigenous cultures”** (Wielemans & Chan, 1992:25).

2.2.1.1 Modernization Theory

Modernization theory is characterized more by the questions it addresses and the social structures that it investigates than by distinctive propositions or conceptual methods. As postulated by its leading investigators Berger, *et al.* (1973), Eisenstadt, (1966), Levy, (1966), and Lerner, (1958) it began from the recognition that a cumulative historical change in the mode of economic production has occurred in the Western World. It then proceeds to give an analytical description of accompanying changes in institutional forms, in sociocultural values, and in the social psychology of individuals and groups. It searches the sociocultural, political, and economic landscape of the diverse developing societies to identify their critical developmental processes and to determine whether they are repeating the history of the West or moving along novel paths.

2.2.1.1.1 Primary carriers of modernity

Berger's concept of modernization theory provides a convenient account within which to focus a concept of health care. In Berger's view, modernization is a transformation of human consciousness that depends upon two processes: *technological production* and *bureaucratization* (as quoted by Gallagher, 1988b:62). Technological production is accomplished through work, which is carried out in practical terms by the organization of human effort, specialization, cooperation, and coordination, which are subordinated to and driven by the empirical prerequisites for fashioning raw materials in production. Technological production is rooted in empirical fact or principle. In contrast, bureaucracy always has an irreducible social root to it - an idea concerning correct, equitable, efficient ways of regulating human relationships that arises within a particular cultural context.

(a) Technological production

Technology, in Berger's conception, is goal orientated and is open to new knowledge, especially scientific knowledge, which will improve the processes of production and lead to new modes of organization of productive effort. In view of the situation in Kuwait, the researcher would like to share her experience in her interaction with a Western trained orthopedic surgeon who was invited on a regular basis to perform knee arthroplasty (replacements) on patients who have damaged knee joints. Most of these are a result of *genu varum* (bow legs), deformity of the knee joint instead of the most likely deformities seen in the West, which is *genu valgum* (knock knee). The researcher, having interacted with the surgeon, discovered that the instruments for the knee replacement were for *genu valgum* deformity instead of the *genu varum*. Thus, although the surgeon

may be asked to perform the surgery, he still has to overcome the technological constraint. Although modern medicine has contributed positively in the management of patients with knee replacements, this technology needs to be readdressed in terms of need analysis in a developing world like Kuwait where the pathology may be different. This would mean that **the answer is not just to import Western technology but to be able to establish one's own needs through specialization, cooperation, and coordination.**

(b) Bureaucratization

In contrast, bureaucracy always has an irreducible social root to it - an idea concerning correct, equitable, efficient ways of regulating human relationships that arises within a particular cultural context. Bureaucratic consciousness and bureaucratic institutions find their most refined expression in the political sphere of society. With respect to the situation in Kuwait, the bureaucracy available in various degrees at different situations has a negative influence in the country at large. A specific example, with reference to patient care: **the elite enjoys special concessions with regard to the best professional care**, even in the government sector. Bureaucracy too has its own dynamic character, which consists of the refining of its categories for the classification of human actions, the status of persons, and the jurisdictional scope of its principles. This is quite contrary to what Islam teaches with regard to the duties of a health professional towards any human being who may require treatment irrespective of creed, color, religion or status. (see Chapter 4, point 4.2.1.1.1. b).

2.2.1.1.2 Secondary carriers of modernity

Technology and bureaucracy are primary carriers of modernity, each of which in its independent fashion exerts a strong force on the formation of modern society. Berger distinguishes these from the so-called secondary carriers “which include a variety of social and cultural processes, most of them historically grounded in the primary carriers but now capable of autonomous efficacy” (Berger, *et al.* 1973:103). The secondary carriers include urbanization, mass education, the growth of the private sphere of the individual life (including the role of the individual as an economic and cultural consumer and as “personalities” in social interaction), and the institutions of knowledge and science. In this thesis only mass education as the secondary carrier will be discussed because of its relevance to the topic.

(a) Mass education

Mass education is an essential feature of modern society and it is associated in various ways with the primary carriers of technology and bureaucracy. Its association with technology comes from the fact that it prepares individuals to participate in economic production. However, to varying degrees, contemporary mass education also provides a base of literacy and advancement in medical knowledge for health care professionals. There is thus some overlap between the demands of technology and the goals of mass education; the latter is more than just “vocational.” Further, the character and content of mass education show the historical markings of a given society (Gallagher, 1988b:63).

Mass education, with specific reference to health care professionals in Kuwait, encourages **individual upward mobility**, which tends to separate the intellectual elite from the masses. Irrespective of the nomenclature of the health care professional, most patients refer to them as doctors, specially in

the case of physical therapists. This gives the health care professional a further impetus for upward mobility. It may be argued that this added mite is applicable and reasonable, but what may not be understood is that with this added mite, is the added responsibility towards humankind. To be able to demonstrate this type of responsibility requires a conscience and **certain value systems for any health care professional**. It is not the intention of the author to give the impression that education is not necessary, for **acquiring knowledge enables its possessor to distinguish right from wrong**.

2.2.2 Acculturation, Culture, Cultural identity and Core Values

2.2.2.1 Acculturation

Acculturation takes place when the culture of an individual or group is modified upon coming into contact with another culture.

In the process of training health care professionals according to the modern medical system, “students undergo a form of ‘enculturation’ whereby gradually they acquire a perspective on ill-health that will last throughout their professional lives” (Helman, 1990:86). These graduates also acquire a high social status, high earning power, and the socially legitimated role of healer, which carries with it certain rights and obligations.

2.2.2.2 Concept of culture

Anthropologists have provided many definitions of the term culture, perhaps the most famous being Tylor’s, (1871 as quoted from Helman, 1990:2) as: “That complex whole which includes knowledge, belief, art, morals, law,

custom and any other capabilities and habits acquired by man as a member of society.” Keesing, (1981:68), stressed the ideational aspect of culture and defined it as comprising: “Systems of shared ideas, systems of concepts and rules and meanings that underlie and are expressed in the ways that humans live.”

From these definitions one can see that **culture is a set of guidelines** (both explicit and implicit) **which individuals inherit as members of a particular society**, and which tells them how to view the world, how to experience it emotionally, and how to behave in it in relation to other people, to supernatural forces, and to the natural environment. It also provides them with a way of **transmitting these guidelines to the next generation** by the use of verbal communication as well as non-verbal communication, like the use of symbols, art and ritual. To some extent, **“culture can be seen as an inherited ‘lens,’ through which individuals perceive and understand the world that they inhabit, and learn how to live within it”** (Helman, 1990:3). Growing up within any society is a form of enculturation, whereby the individual slowly acquires the cultural “lens” of that society. Without such a shared perception of the world, both the cohesion and the continuity of any human group would be impossible.

One aspect of this **“cultural lens”** is the division of the world, and the people within it, into categories, each with their respective name. For example, all cultures divide their members into different social categories, such as young and old, male and female, upper class or lower class, able or disabled, normal or abnormal, healthy or ill. Also, all cultures have elaborate ways of moving people from one social category into another, for example, from being “ill person” to becoming a “healthy person,” and also of confining people, sometimes against their will, to the categories into which they have been placed such as being, mentally deranged, disabled or elderly.

2.2.2.3 Cultural identity

According to Leach (1982:41-43), virtually all societies have more than one culture within their borders. For example, most societies have some form of social stratification, into social classes, castes, or ranks, and each stratum is marked by its own distinctive cultural attributes, including manners, styles of dress, dietary patterns, linguistic usage's, and so on. Rich and poor, powerful and powerless, each has its own inherited cultural perspective. Even men and women can have their own distinctive cultures within the same society, and are expected to conform to different norms and different expectations. In addition to such social strata, it is important to reflect on modern complex societies, such as the UK or the USA, which include within them different religious and ethnic minorities, foreign students, political refugees, recent immigrants, and migrant workers, each with their own distinctive culture. "Many of these groups will undergo some degree of acculturation, whereby they incorporate some of the cultural attributes of the larger society" (Helman, 1990:3). A further subdivision of culture within a complex society is seen in the various professional subcultures that exist, such as the health care professions, which include doctors, physical therapists, radiographers, medical laboratory scientists, nurses, health care information specialists, and the like. In each case, they form a group apart, with their own concepts, rules and social organization. Although each subculture is developed from the larger culture, and shares many of its concepts and values, it also has unique, distinctive features of its own. Students in these professions also undergo a form of enculturation, as they slowly acquire the "culture" of their chosen career. In doing so, they also acquire a different perspective on life from those who are outside the profession. In the case of the training of health care professionals, its subculture also reflects many of the social divisions and prejudices of the wider society, and this might interfere with both health care and health-care-professional - patient communication, as explained later in chapter four (4.2.2).

Cultural background therefore has an **important influence** on many aspects of people's lives, including their beliefs, behaviors, perceptions, emotions, language, religion, family structure, diet, dress, body image, concepts of space and time, and attitudes to illness, pain and other forms of misfortune, all of which have important implications for **health and delivery of health care**. However, the culture into which one is born, or in which one lives, is by no means the only such influence. It is only one of a number of influences which include individual factors (such as size, age, gender, experience, personality, intelligence and experience), educational factors (both formal and informal, and including education in a religious, ethnic or professional subculture), and socioeconomic factors (such as social class, economic status, and the networks of social support from other people).

It is important to understand that "cultures are never homogeneous" (Helman, 1990: 4), and therefore it is important not to use generalizations in explaining people's beliefs and behaviors. One should thus differentiate between the rules of a culture which govern how one should think and behave, and how people actually behave in real life.

The misuse of the concept of culture is also noticeable especially in health care, where its influence may be over-emphasized in interpreting how some people present their symptoms to health care professionals. Symptoms or behaviors may be ascribed to the person's culture, when they may be due to an underlying physical or mental disorder.

When cultures come into contact, they influence each other and an exchange of cultural elements occurs. Banks and Lynch (1986:196) point out that "Even when a group is conquered, it influences the culture of the conquerors. The Greeks, even though conquered by the Romans, influenced Roman culture." Wielemans and Chan (1992: 29) defined the culture of a nation or of a particular

(ethnic) group as an expression “by the whole of the dynamic relations people have established with nature, with fellowmen, with the psycho-somatic self and possibly also with the transcendental.” The past few years have witnessed a tremendous proliferation of cross-cultural studies of ‘traditional’ medical systems (Fabrega 1975; Landy 1977a; Akerele 1986; and Fulder 1986), and this trend is closely tied to the continuing growth and development of “modern medicine” throughout the world. An interesting study by Halberstein and Saunders (1978:194) states that unlike most other Caribbean islands, the Bimini medical system is not intimately tied to the religious structure of the community. Hallucinogenic and psychoactive substances are notably absent from the plant medicinal. The present findings suggest that the Bimini medical system has historically been efficacious in the treatment and management of many health problems on the island. Part of the success may be attributed to the resourceful utilization of indigenous medicinal plant species. In recent years the island has experienced a relatively smooth process of medical modernization including the increased availability of “Westernized” health care and the **gradual supplementation of the herbal remedies by imported patent and prescription medications.** The exposure to “Western medicine” has recently intensified through direct health care delivery, the media, the radio, television and tourism which have demonstrated the sociocultural effects on health care through the media and other agencies of acculturation. This has clear implications of the “industrial mentality” in the delivery of health care in different parts of the world.

“The introduction of industrialization and the penetration of the ‘**industrial mentality**’ will influence not only the pursuit of **cultural equilibrium**, that is, the ecological, the social, the psycho-somatic, and possibly the religious, but also the **view of man, society and man’s role in nature and in the cosmos.** These new relations will subsequently change the socialization processes, the quality of culture transfer especially through the socializing agents of the family and the school. Similarly, industrialization could be perceived as a relatively new

culture, characterized mainly by the 'industrial mentality'" (Wielemans and Chan, 1992: 29). In this context, **emphasis will be on patent and prescriptive medication instead of herbal remedies.**

2.2.2.4 Core values

"Core values can be regarded as forming one of the most fundamental components of a group's culture" (Smolicz, 1981:75, as quoted from Wielemans and Chan, 1992:29). They generally represent the fundamentals of the ideological system and act as identifying values which are symbolic of the group and its membership. **Rejection of core values carries with it the threat of exclusion from the group.** In fact, the deviant individual may himself feel unable to continue as a member. "Core values are singled out for special attention because they provide the indispensable link between the group's culture and social systems; in their absence both systems would suffer disintegration" (Wielemans and Chan, 1992:29-30). Thus, it is through core values that social groups can be identified as distinctive ethnic, religious, scientific or other cultural communities. Sharing of similar values creates solidarity among members of the same group as well as between different groups. Therefore, the analysis in this study will focus on the interpretation of the core values (actual and desirable) of both the Western industrial culture (the industrial mentality) and the Islamic culture with specific reference to Kuwait (the specific features of their cultural identity) and examine the extent of consonance and/or dissonance on each of the relation-axes between the two sets of core values.

2.2.3 Educational Socialization and Core Curriculum

“Education is always embedded in a specific socio-cultural context” (Wielemans and Chan, 1992:31). Within the context of a family socialization and or education, and even more intentionally in schools, there is a noticeable transfer of the dominant interpretation schemes (cognitive and normative) that are considered as ‘normal’ and used by man in his daily cultural relationships with nature, with fellowmen, with himself and with the transcendental.

Any educational curriculum is both an official document and a socialization instrument in which principles (general and more subject-orientated objectives), content, methods and the organization of learning processes are described as interdependent aspects in order to achieve intended outcomes (Wielemans and Chan, 1992:31). These outcomes mostly imply desirable forms of knowledge, skills and attitudes, but sometimes they expect also to achieve equity, equality and quality in, as well as by education. In many countries this concept is based on the democratic principle that all health care professionals should have access to a certain kind of knowledge, skills and experience in order to be able to participate in a critical-constructive and creative way to the development of their society. In this study, a “**core-curriculum**” refers to the undergraduate curriculum for the training of health care professionals as is applied in Kuwait.

In operational terms, and for the purpose of this study, the extent of consonance and/or dissonance will be between the content of educational socialization as expressed in the “**core curricula**” of the education of **health care professionals**, both explicit and implicit, and the **core values** that are characteristic of the **industrial mentality and/or the cultural identity**. Using the **relation-axes model**, the core curricula can be divided into at least four main categories: natural sciences, social sciences, human sciences, and religious or

moral education. Each category has its different combination of subjects, content, learning activities, and skills, as well as attitudes to be acquired. For the purpose of comparative analysis, each of the categories is to be examined in terms of its qualification objectives, identification objectives and its social functions.

The **qualification objectives** refer to those cognitive and psychomotor aspects of learning that are being enforced in the education of health care professionals. They are elaborated in the specification of the kind of knowledge and skills that are being considered as essential for preparing the health care professionals for their future roles in society.

The **identification objectives** include the values, norms, attitudes and proper behavior that are regarded as desirable for health care professionals to acquire for participation in social life.

The **social functions** of education, as perceived by the dominating group(s) are the political, social, economic, academic or religious principles, which reflect to a great extent the social needs and national goals of the nation.

Through the qualification and identification patterns in education of the health care professionals at university level, it should be possible to identify the kind of social issues which are considered as being of immediate concern to the health care professional in that particular society.

Figure 2.1 describes the operationalization of the core curricula as explained by Wieleman and Chan (1992:32).

FIGURE 2.1 OPERATIONALIZATION OF THE CORE CURRICULA

Core curricula	Content of Educational socialization		
Relation-Axes	Qualification objectives	Identification objectives	Social functions
Man-nature (mainly natural sciences)			
Man-fellowmen (mainly social science)			
Man-self (mainly human science)			
Man-transcendental (mainly religious/ ethical studies)			

It is through the qualification and identification patterns in training of health care professionals at tertiary institutions that it would be possible to identify the kind of social issues which are considered as being of immediate concern to a particular society. More of this model will be discussed in Chapter 5 (5.3.1.).

2.3 THE FOUR RELATION AXES

2.3.1 THE RELATION BETWEEN MAN AND HIMSELF

According to Wielemans and Chan (1992:26), “the ‘**industrial mentality**’ has challenged man mainly to explore and develop his extrovert capacities so that his mind as well as his body can comprehend, manipulate and control the world around him.” Medical science, psychology and educational studies (pedagogical and andragogical methods) have all developed to this end in

order to maximize man's psycho-somatic capacities for the realization of man's complete control of his environment.

Since this aspect of the relation-axes is concerned with man and himself, the author will focus initially on discussing the different definitions of health and illness, and how different people perceive their pain.

2.3.1.1 Health

2.3.1.1.1 Definition of the term "health"

As early as 1947, the World Health Organization defined health as **"a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity"** (World Health Organization [WHO], 1958). Recently, the concept of "spiritual well-being" was added to this definition. In addition, WHO has established a new program to explore the possibilities of traditional medicine functioning in conjunction with modern medicine, to achieve more adequate coverage within locally sustainable cost limits.

Definitions of what constitutes both **"health"** and **"illness"** vary between **individuals, cultural groups and social classes**. In most cases, health is seen as more than just an absence of unpleasant symptoms. In many non-industrialized societies health is conceived of as a balanced relationship between man and man, man and fellowmen, man and nature, and man and the supernatural world. A disturbance of any of these may manifest itself by physical or emotional symptoms. Among Western communities, definitions of health tend to be less all-embracing, but they also include physical, psychological and behavioral aspects. These vary between social classes; for example, according to Fox (1968:90-96), members of the highest socioeconomic

class usually reported a persistent backache to their physician as an “abnormal” symptom, while members of the lower socioeconomic class regarded it as “an inevitable and innocuous part of life and thus as inappropriate for referral to a doctor.” Thus, the functional definition of health, common among poorer people, is probably based on the (economic) need to keep working, however they feel, as well as on low expectations of medical care.

The process of “becoming ill” involves both subjective experiences of physical or emotional changes, and, except in the very isolated cases, the confirmation of these changes by other people. In order for this confirmation to take place there must be a “consensus” among all concerned about what constitutes both health and abnormal signs and symptoms (Helman, 1990:94). There must also be a standardized way in which an ill person can draw attention to these abnormal changes to mobilize care and support. According to Lewis (1981:151-162), “in every society there are some conventions about how people should behave when they are ill... in most illness there is some interplay of voluntary and involuntary responses in the expression of illness. The patient has some control of the way in which he shows his illness and what he does about it.” **Both the presentation of illness, and others’ response to it, are largely determined by sociocultural factors.** Each culture has its own language of distress, which bridges the gap between subjective experiences of impaired well-being and social acknowledgment of them. Cultural factors determine which signs and symptoms are perceived as abnormal; they also help to shape these diffuse emotional and physical changes into a pattern which is recognizable to both the patient and those around him. The resultant pattern of signs and symptoms may be termed an “illness entity,” and represents the first stage of becoming ill (Helman, 1990:94).

Similarly, the Community Health Foundation regards health as “more than just the absence of pain or discomfort. Good health is a dynamic relationship between the individual, friends, family and the environment within which we

live and work.” Rubel (1977:119) has defined folk illnesses as “syndromes from which members of a particular group claim to suffer and for which their culture provides an aetiology, a diagnosis, preventive measure and regimens of healing.” These folk illnesses are more than specific clustering of symptoms and physical signs. They also have a range of symbolic meanings related to moral, social or psychological aspects of life for those who suffer from them. In some cases they link the suffering of the individual to changes in the natural environment, or to the workings of supernatural forces. In other cases, the clinical picture of the illness is a way of expressing, in a culturally standardized way, that the sufferer is involved in social conflicts or disharmony with friends or family (Helman, 1990:97).

It is easy to see that a system of medicine which regards balance and harmony with the environment as the basis of health will be likely to emphasize preventive measures. To arrive at a consensus of what is the definition of health is difficult because health is a subjective experience whose quality can be known intuitively but can never be exhaustively described or quantified. However, it is necessary to define health at least approximately. We may begin our definition by saying that health is a state of well-being that arises when the organism functions in a certain way (Capra, 1982:351). **Health is really a multidimensional phenomenon involving interdependent physical, psychological, and social aspects.**

The author finds Capra’s (1982:354) definition of health rather all embracing: “the systems view of health is based on the systems view of life. Living organisms, as we have seen, are self-organizing systems that display a high degree of stability. This stability is utterly dynamic and is characterized by continual, multiple, and interdependent fluctuations. To be healthy such a system needs to be flexible, to have a large number of options for interacting with its environment. **The flexibility of a system depends on how many of its variables**

are kept fluctuating within their tolerance limits: the more dynamic the state of the organism, the greater its flexibility. Whatever the nature of the flexibility - physical, mental, social, technological, or economic - it is essential to the system's ability to adapt to environmental changes. Loss of flexibility means loss of health."

Thus, the notion of **dynamic balance** is a useful concept for defining health. "Dynamic" is of crucial importance for defining health here, indicating that the necessary balance is not a static equilibrium but rather a flexible pattern of fluctuations of the kind described above. Health, then, is an experience of well-being resulting from a dynamic balance that **involves the physical and psychological aspects of the organism, as well as its interactions with its natural and social environment.**

2.3.1.2 The concept of culture as it is related to pain

Pain is a phenomenon experienced in daily life that may direct a patient to a modern health care professional. Pain is a concept researched by many to try and understand its neurophysiological basis, however, there is more to pain than a mere neurophysiological basis. There are social, psychological and cultural dimensions that need to be considered. According to Helman (1990:158), it is important to consider factors that influence the perception of pain:

1. Not all social or cultural groups respond to pain in the same way.
2. How people perceive and respond to pain, both in themselves and in others, can be largely influenced by their cultural background.
3. How, and whether, people communicate their pain to health care professionals and to others can also be influenced by social and cultural factors.

Helman (1990:158) further elaborates that anthropologists differentiate between two forms of pain behavior:

- a) An involuntary, instinctual reaction, such as pulling away from burning or a sharp object.
- b) A voluntary reaction, such as:
 - self directed treatment of the symptom (by taking an aspirin, for example).
 - asking another person for help in relieving the symptom.

Voluntary reactions to pain that involve other people are particularly influenced by social and cultural factors, and will be described below in more detail, with examples. Pain perception can be communicated by facial expression, grimaces and changes in demeanor or activity, as well as by certain sounds made by the victim, or words used to describe his or her condition or appeal for help (Fabrega and Tyma, 1976:349-371). It is possible, though, to exhibit pain behavior in the absence of a painful stimulus or, conversely, not to exhibit such behavior, despite the presence of the painful stimulus. To clarify this point, it is useful to identify two types of pain behavior, or reactions to pain: private pain and public pain.

2.3.1.2.1 Private pain

There are many reasons why a person may experience pain but this pain be not communicated either verbally or nonverbal. This type of behavior is common among societies that value stoicism and fortitude, where individuals exercise patience in times of trouble and courage in bearing pain. In some cultures the ability to bear pain without flinching, that is, without displaying pain

behavior, may be one of the signs of manhood, and part of initiation rituals marking the transition from boy to man.

In other situations, where less dramatic forms of a lack of pain behavior occur are in those who are semi-conscious, paralyzed, or too young to articulate their distress, or in situations where such behavior is unlikely to bring a sympathetic response from other people. Therefore, **an absence of pain behavior does not necessarily mean the absence of "private pain."**

2.3.1.2.2 Public pain

Pain behavior, especially in its voluntary aspects, is influenced by social, cultural and psychological factors. These determine whether private pain will be translated into pain behavior, and the form that this behavior takes, and the social settings in which it occurs (Helman, 1990:160).

The decision as to whether to translate private into public pain depends partly on the person's interpretation of the significance of the pain; whether, for example, it is seen as "normal" or "abnormal" pain, the latter being more likely to be brought to the attention of others. An example of "normal" pain is dysmenorrhoea (painful menstruation). In two studies quoted by Zola (1966:615-630), women from both lower and upper socioeconomic groups were asked to keep a calendar in which they recorded all bodily states and dysfunction's. Only a small percentage even reported the dysmenorrhoea as a 'dysfunction,' and among the lower income group only 18% even mentioned the menses or its accompaniments. Thus, the definitions of what constitutes an "abnormal" pain, and which requires medical attention and treatment, tend to be culturally defined, and to vary over time.

Zborowski (1952:16-30) has pointed out that cultures or groups that emphasize military achievements, for example, both expect and accept battle wounds, while more peaceful cultures may expect them, but not accept them without complaint. Similarly, he notes how in Poland and in some countries labor pains are both expected and accepted, while in the USA they are not accepted and analgesia is frequently demanded. These attitudes towards pain are acquired early in life, and are an essential part of any culture's child-rearing practices.

At times physical pain is particularly seen as a wider spectrum of "misfortune;" pain, like illness generally, is only a special type of suffering. As such, it can provoke the same types of questions in the individual as do other forms of misfortune: "Why has it happened to me?" or "What have I done to deserve this?" Where pain is seen as divine punishment for a behavioral lapse, the victims may be unwilling to seek relief for it; experiencing the pain without complaint becomes, in itself, a form of expiation. If pain is seen as the result of moral transgressions, the response might also be self-imposed penitence, where fasting or prayer may be the prescription rather than consultation with a health care professional. If interpersonal malevolence, such as "sorcery," "witchcraft," or "hexing," is thought to have caused a pain, the strategy for pain relief may be an indirect one, such as a ritual of exorcism, for example.

This wider view of pain is common in non-Western societies, and members of these societies may find the secular Western treatment of pain, where the prescribing of a pain-relieving drug is seen as both incomplete and unsatisfying. Although modern medicine does acknowledge the existence of "psychosomatic" or "psychogenic" pain, its attitude to "organic" pain does not take into account the social, moral and psychological elements that many people associate with pain (Helman, 1990:161). However, the idiom of pain in modern English does still show linkages to other forms of suffering, including emotional distress, interpersonal conflicts and unexpected misfortune. These are often described using the metaphor of physical pain: "he hurt me

deeply!”, “I had a painful experience!”, “the incident hurts my soul!” and “it was a blow to me!”. In more traditional societies, the link between physical pain and social, moral and religious aspects of the culture is likely to be much more direct, and to influence closely how people perceive their ill-health.

The patient’s perception in expression of the pain in the presence of a health care professional will depend on the personality of the clinician, as well as whether he or she comes from a similar culture and social class to that of the patient. Such behavior may be displayed to one clinician, but not to an unsympathetic colleague, leading to different evaluations of the patient’s condition by two clinicians (Helman, 1990:162).

A further factor determining whether private pain is made public is the perceived intensity of the pain sensation itself. There is some evidence that this perception (and “pain tolerance”) can be influenced by culture. In the review of literature on culture and pain, Wolff and Langley (1977:313-319) confirm that cultural factors in terms of attitudinal variables, whether explicit or implicit, do indeed exert significant influences on pain perception. According to Lewis (1981:151-162), the intensity of a pain sensation does not follow automatically from the extent and nature of an injury. Beliefs about the meaning and significance of a pain, the context in which it occurs, and the emotions associated with that context, can all affect pain sensation. In traditional medicine, certain states of religious trance or meditation can help reduce the intensity of pain perception, although the physiological reasons for this are not well understood. Examples of this phenomenon are the Muslim “fakirs” of India, or the fire-walkers of Sri Lanka, who all undergo self-inflicted pain or discomfort, apparently without experiencing the full intensity of the pain.

2.3.1.2.3 The presentation of public pain

Each culture or society has its own unique language of distress. Its members have their own specific way of signaling, both verbally and non-verbally, that they are in pain or discomfort. According to Landy (1977a:313), the form that pain behavior takes is largely culturally determined. Some cultural groups expect an extravagant display of emotionality in the presence of pain, others value stoicism, restraint and the playing down of their symptoms. Zola (1966:615-630) has pointed out that the Italian response was marked by "expressiveness and expansiveness," which he sees as a defense mechanism by dramatizing a way of coping with anxiety "by repeatedly over-expressing it and thereby dissipating it." In contrast, the Irish tended to ignore and underplay their bodily complaints: for example, "I ignore it like I do most things." These two different responses to pain may have negative effects on the types of medical treatment that these patients are given, especially by health care professionals from different cultural backgrounds. A modern health care professional might evaluate the Italian expression of pain as "over-emotional" or "hypochondriac" and the Irish expression of pain might be ignored because it is underplayed, Zola (1966:615-630) warns that this might perpetuate their suffering by creating a "self-fulfilling prophecy."

Thus, a **modern health care professional** may be **orientated more towards purely physical explanations of ill-health**, acknowledging only somatic signs and symptoms, in contrast to **other healers** who might be more interested in **psychodynamic processes**.

2.3.2 MAN AND NATURE/ENVIRONMENT

“Industrialization has introduced basically material-converting techniques and the corresponding industrial activities which are responsible for inducing a revolutionary change in man’s attitude towards nature” (Wielemans and Chan, 1992:26). The traditional organic and sacred alliance with nature, the view that the world is a web of mutual relations and interdependent energy patterns in an ongoing dynamic process, has been denied as non-functional by the dominating scientism claiming that everything can be observed, rationally understood, explained and therefore, predicted and mastered. **This linear, analytical and quantifiable reductionistic way of thinking has replaced the previous cyclical, holistic and qualitative ecological consciousness.** “Measurability and categories take precedence over intuition, synthesis and integration” (Wielemans and Chan, 1992:26). In view of this relationship with nature, this aspect of the relation-axes is concerned with the nature of diseases, diagnosis, modern birth culture, the origin of Western birth culture, culture related to fertility and infertility, culture related to contraception, abortion and infanticide, and the metaphors of illness.

To understand **human nature**, we need to study not only its physical and psychological dimensions, but also its social and cultural manifestations. Human beings evolve as social animals and cannot keep well physically or mentally, unless they remain in contact with other human beings. More than any other social species we engage in collective thinking, and in doing so we **create a world of culture and values that becomes an integral part of our natural environment.** Thus, the biological and cultural characteristics of human nature cannot be separated. Humankind emerged through the very process of creating culture and needs this culture for its survival and further evolution (Capra, 1982:324).

2.3.2.1 Disease

Modern medicine, like Western science generally, is based on scientific rationality; that is, all assumptions and hypotheses must be capable of being tested and verified under objective empirical and controlled conditions. Any phenomena relating to health and sickness only become “real” when they can be objectively observed and measured under these conditions.

The medical definition of ill-health is largely based on objective, demonstrable physical changes in the body’s structure or function, which can be quantified by reference to “normal” physiological measurements. These abnormal changes, or “diseases,” are seen as “entities,” with their own specific “personality” of signs and symptoms. Each disease’s personality is made up of a characteristic cause, clinical picture (signs and symptoms), results of laboratory investigations, natural history, prognosis and appropriate treatment. According to Fabrega and Silver (1973:218-223), the medical perspective assumes that diseases are “universal in form, progress, and content,” and that they have a “recurring identity,” that is, it is assumed that, for example, rheumatoid arthritis will be the same disease, in whatever culture or society it appears. It will also have the same cause, clinical picture, treatment, and so on. However, this perspective does not include the social and psychological dimensions of ill-health, and the context in which it appears, which determine the meaning of the disease for individual patients, and for those around them. “Because modern medicine focuses more on the physical dimensions of illness, factors such as the personality, religious belief, and socioeconomic status of the patient are often considered irrelevant in making the diagnosis or prescribing treatment” (Helman, 1990:89).

2.3.2.2 Diagnosis

The most important measures intended to arrive at a medical diagnosis are history, (physical) examination and investigation. **History taking** receives little attention in the discussions related to the disease process as the **emphasis** is upon **“objective measurement.”** The nature of man’s environment, both in the home and work setting are important in making the diagnosis. This has clear implications for the need to understand the patient’s culture and environment. No medical history is complete without inquiring about the patient’s food and drink intake. What people eat is one of the major environmental influences that can sooner or later contribute to disease. The diagnosis of occupational lung disease can easily be overlooked when in actual fact the victims of it may be eligible for compensation.

Diagnosis is an essential aspect in modern medicine. There should be no treatment without a diagnosis; even in psychiatry and psychotherapy, the health care professional may deliberately choose a more process-like approach, considering that in general practice it is often impossible to arrive at a real diagnosis.

The diagnostic system of modern medicine is exemplified in the International Classification of Diseases (Aakster, 1986:267). It is based upon a classification in terms of location and/or etiology. This emphasis is on identifiable signs and symptoms of a local character to provide a diagnosis. It was discovered that different diseases correspond to different deviations in organs, and the need arose to classify these different diseases and to develop the art of diagnosis. This led to the location of disease in the cell or in DNA/RNA structures, and to seeing micro-organisms as the prime causes of disease, all of which should be classified exactly to make rational therapy possible (Reep, 1977, as quoted by Aakster, 1986:267).

Although there is an International Classification of Diseases, various studies have illustrated significant differences in the types of diagnosis given, and the treatment prescribed, among different Western medical systems (Helman, 1990:66). Payer (1988 as quoted by Helman, 1990:67) has examined the medical systems of the USA, France, Germany and the UK. She has described some of the diagnostic categories that have no clear equivalents in other countries. For example, in the USA she sees a relation between the high rate of coronary bypass operations and other types of surgery, and the American view of the body as a repairable "machine" and one that needs to be "repaired" and "overhauled" at regular intervals. She describes the dominant attitude of US doctors to sickness as an "aggressive" and "can-do" approach, part of the legacy of the frontier spirit: "Americans not only want to do something, they want to do it fast, and if they cannot they often become frustrated." As a result, US doctors do more diagnostic tests on their patients, and perform surgery more often, than do doctors from the other three countries (Payer 1988 as quoted by Helman, 1990:67).

Modern scientific medicine allows health care professionals to form into groups apart, with their own values, theories of disease, rules of behavior, and organization into a hierarchy of specialized roles. The medical profession can be seen as a healing subculture, with its own particular world view. In the process of medical education, students undergo a form of "enculturation," whereby gradually they acquire a perspective on ill-
- health that will last throughout their professional lives (Helman, 1990:86). They also acquire high earning power, high social status, and socially legitimated role of healer, which carries with it certain rights, privileges and obligations. According to Helman (1990:86), the basic premises of this medical perspective can be described as:

- Scientific rationality
- Emphasis on objective, numerical measurement
- Emphasis on physicochemical data
- Mind-body dualism
- The view of “diseases” as entities
- Emphasis on the individual patient, rather than on the family or community

Modern medicine, like Western science generally, is based on “scientific rationality;” that is all assumptions and hypotheses must be capable of being tested and verified under objective, empirical, and controlled conditions. Phenomena relating to health and sickness only become “real” when they can be objectively observed and measured under these conditions. Once they have been observed, and often quantified, they become clinical “facts,” the cause and effects of which must be discovered.

An interesting example is a patient who is coughing, and the cough is productive with blood stains. This is probably indicative of tuberculosis (TB) where a tuberculin bacillus may be identified in the sputum of a patient who will require a course of anti-TB treatment. However, tuberculosis is one of the world’s deadliest diseases, killing more than three million people a year and there is no immediate prospect of a new drug to treat it. This deadly lung disease is resurgent because it has developed strains resistant to the antibiotic previously used to treat it. Tuberculosis is the only disease WHO has ever termed a global emergency because it is found everywhere; there is no country without some cases of TB (Kuwait Times, Sunday, March 17, 1996. Spectrum:1). There are scientists with advanced medical knowledge who are exploring methods ranging from attacking the whole bacteria to boosting the human body’s own immune system. What was explained is that more than

95 per cent of TB sufferers live in the developing world. Consequently, profits from any drug are likely to be lower than from treatments developed for less serious ailments more prevalent in the prosperous West. Here we see the operationalization of the key-concept, “industrial mentality” in the management of diseases.

Where a specific causal influence cannot be isolated, the clinical fact is labeled “idiopathic,” that is, it has a cause, but that cause has yet to be discovered. **Where a phenomenon cannot be objectively observed or measured, for example, a person’s belief about what caused them to be ill, it is considered less “real.”** The “model” of modern medicine is mainly directed towards discovering and quantifying physicochemical information about the patient, rather than less measurable social and emotional factors. The modern western doctor’s view of clinical reality “assumes that biological concerns are more basic, ‘real,’ clinically significant, and interesting than psychological and sociocultural issues” (Kleinman *et al.*; 1978. as quoted by Helman, 1990:87).

2.3.2.3 Modern Birth culture

In all cultures, women giving birth are assisted during the labor by one or more other persons. These people may be female relatives or friends, a traditional midwife or birth attendant, or a medically qualified obstetrician in a hospital setting.

Stacey (1988:52) has described how in the UK, midwifery was an exclusively female profession until the seventeenth century, when a few “men-midwives” began to appear. Much of the knowledge of traditional midwives came from their own experience of pregnancy and childbirth. According to Leavitt (1987:230-255), a similar process has taken place in the USA. Before 1880, women

giving birth were aided mainly by female relatives and birth attendants. Only occasionally were doctors called in to help with difficult labors, but even then the power to make decisions about the birth remained with the woman, her family and friends. From 1880 to 1920, however, although most births still took place at home, the **medical profession gradually increased its authority over the birth process**, and how it was to be managed. By the 1930s, for the first time, childbirth took place more often in hospital than at home. In this new hospital setting, control over the management of the birth process became almost exclusively a medical matter.

During the 1950s modern obstetrics achieved notable successes in reducing both maternal and neonatal mortality and morbidity, in preserving the lives of premature infants, in diagnosing congenital abnormalities in utero, and in successfully treating infertility with in vitro fertilization (IVF) and other techniques. However, for all its technical success, the birth culture of Western society, like other aspects of modern medicine, has been criticized by many women for a number of reasons. These include:

- Its over-emphasis on the physiology, rather than the psychosocial aspects of pregnancy and birth.
- Its tendency to medicalize a normal biological event, turning it into a medical problem, and thus converting the pregnant woman into a passive and dependent “patient.”

Thus, modern medicine has been criticized for ignoring the meanings that women give to both their pregnancy and their childbirth experiences.

2.3.2.4 The origin of Western birth culture

Davis-Floyd (1987:479-495) traces the origin of the birth culture of modern Western obstetrics to the seventeenth century image developed by Descartes, Bacon and Hobbes, of a mechanistic universe, following predictable laws, which could be discovered by science, and controlled by technology. The Cartesian model of **mind-body dualism** led to the metaphor of the body-as-machine; and the conceptual divorce of body from soul removed the body from the law of religion, and placed it firmly in the hands of science. She argues further that Christian theology held that women were inferior to men, and closer to nature. Consequently, the men who established the idea of body-as-machine also firmly established the male body as the prototype of this machine; insofar as the female body deviated from the male standard, it was regarded as inherently abnormal, defective, dangerously unpredictable, and under the influence of nature, and in need of constant manipulation by men. Thus, this led to the demise of midwifery, and the growth of the metaphor of the female body as a defective machine, forming the philosophical basis for modern obstetrics.

Furthermore, the conceptual separation of mother and infant is basic to the technological model of birth. The baby is removed from the mother, handed to a nurse who inspects, tests, bathes, diapers and wraps the infant, and administers a vitamin K injection and antibiotic eye drops; then having been “properly encultured” or “baptized” into the world of technology, it is handed back to its mother for a short time, and then placed in a plastic bassinet for four hours of observation, before being returned to its mother. To Davis-Floyd (1987:479), therefore, “the mother’s womb is replaced, not by her arms but by the plastic womb of culture.” Here we note the operationalization of the key concept “**culture**” and its **influence on the modern birth process**. The separation of mother and child is further intensified by assigning a separate health

care professional specialist, like the pediatrician or neonatologist, to the newborn infant.

She describes how, during the birth itself, the mother lies surrounded by medical technology, by external and internal fetal monitors, intravenous drips, charts and instruments. To the woman “her entire visual field is conveying one overwhelming perceptual message about our **culture’s deepest values and beliefs; technology is supreme**, and you are utterly dependent on it and on the institutions and individuals who control and dispense it” (Davis-Floyd, 1987:479). This impression is strengthened by the frequent use of episiotomies, which “transforms even the most natural of childbirth’s into a surgical procedure” (Davis-Floyd, 1987:479). Again we note the operationalization of the key concept “**industrial mentality**” in the modern birth process. In addition, we realize the operation of the multivalent way of looking at phenomena as explained by Badenhorst (1996:1-11) where bits of value on the continuum for both modern and traditional views are recognized. Credit to modern medicine should definitely be acknowledged as modern obstetrics achieved notable success in: (i) reducing both maternal and neonatal mortality and morbidity, (ii) preserving the lives of premature infants, (iii) diagnosing abnormalities in utero, and (iv) successfully treating infertility. However, it’s over emphasis on the physiological rather than the psychological aspects of pregnancy and birth should also be recognized.

2.3.2.5 Culture related to fertility and infertility

Fertility is a universal human concern, as is the concern over infertility whatever its cause. Most cultures include a series of rituals or prayers or special precautions to help a woman successfully conceive and to carry her

through to a safe delivery. Where a woman fails to conceive, a wide variety of cultural explanations usually come into play to explain and deal with her infertility. Sometimes, lay explanations for misfortune usually place the blame either on the individual's behavior, or on the natural world, or on supernatural forces or gods (Helman, 1990:153).

Concepts of fertility and infertility are also partly dependent on how people conceptualize the inner workings of their bodies, and the process of conception and birth. For example, Cosminsky (1982:205-239) has described how in a Guatemalan village, some of the traditional midwives believed that infertility was caused by a "cold womb," which was not hot enough to receive the semen. Most traditional Arab midwives also believe in this concept. One form of treatment was to administer "hot" herbal teas, and to "warm the womb" in a special sweatbath. If, however, the villagers believed that the sterility was caused by divine intervention, the midwife was not expected to cure it.

Among the educated, the question of infertility maybe related to the female or the male. The potency of the male and the possibility of him being sterile is rarely questioned among a wide range of individuals. In most traditional societies, blame for the infertility is usually placed on the woman. In some small-scale societies particularly, a "barren women" is often a marginalized figure, and seen as someone both personally unfulfilled and socially incomplete.

However, definitions of who is responsible for the infertility are not static, and they often undergo significant changes during Westernization, migration, urbanization, and other major social changes.

2.3.2.6 Culture related to contraception, abortion and infanticide

There are different attitudes to contraception, abortion and infanticide. The first two can be viewed as forms of population control, while infanticide has sometimes a political or individual motive that seems to vary widely between cultures. A possible reason for a society to practice infanticide may be the size of the population, its food supply, and the particular ecological niche that it occupies. It was a common practice among pagan Arabs to kill a female child because she was seen as someone who will bring disgrace to the family if she had a relationship outside marriage. In some cases, the infants of one gender may be killed, but not the other, as in the case of the Tenetehara, a Brazilian Indian tribe, who believed that a woman should have three children, but not all of the same sex; if she had two daughters (or two sons) and gave birth to a third of the same sex, the baby would be killed (Helman, 1990:154). According to Keesing (1981:161), in the past "there is little doubt that peoples with finite space and resources in many parts of the world practiced infanticide of both sexes or of females, so as to restrict population numbers." The Qur'an makes reference to Pharaoh who at one time demanded the death of all new born male babies for a political reason with the intention of killing Prophet Moses (S.2:V.49). Different cultures may have varying policies with regard to the concept of abortion; some may strictly abhor it at any stage of pregnancy or for any reason, others may indicate a widespread tolerance of abortion or acceptance of abortion under certain limited circumstances. In the Western world the debate on abortion centers both on whether the woman is entitled to the control over her own body and fertility, and also on whether the fetus is regarded as a "person," with the same rights and privileges as other members of the society, or is seen merely as an organ or collection of cells.

Having reflected on the relation-axes between man and nature in the area of disease, diagnosis, modern birth culture, the origin of western birth culture, culture related to fertility and infertility, contraception, abortion and infanticide, it is important to reflect on man and fellowmen.

2.3.3 THE RELATION BETWEEN MAN AND FELLOWMEN

According to Wielemans and Chan (1992:26), “**Industrial mentality**’ stresses the importance of efficiency and effectiveness in all human relations. Certain ‘techniques’ that have been developed in both the human and social sciences can influence and transform relations.” These “techniques” are being applied in different sectors of society, in the **management of health care, in the delivery of health care**, in patient communications, in the salesmanship and advertising of medical equipment, in mental and social health, and in education as well. As these “techniques” have reached so many different aspects of social life, they also change human relations by **introducing competition, self-achievement, individualistic thinking and behavior**. There is a great need for individual autonomy and self-determination. “The introduction of contract-relations between people, together with an increased strategic attitude of deliberate planning and steering-capacity, have chilling influences on inter-individual and social relations in modern societies” (Wielemans and Chan, 1992:26).

The modernistic attitude of “**self-achievement**” and “**self-determination**” will most certainly affect the relationship between man and fellowmen. In view of this influence, this aspect of the relation-axes will reflect the options available to the patient when he becomes ill, and aspects of the relationship between the patient and health provider. In addition, the comparison of medical systems and metaphors of illness will be discussed.

2.3.3.1 Treatment

2.3.3.1.1 Medical pluralism in the Western countries

In Western countries such as the UK, as in other complex societies, there is a wide range of therapeutic options available for the alleviation of physical discomfort or emotional distress. Kleinman (1980:49-70) has suggested that in looking at any complex society, one can identify three overlapping sectors of health care: **the popular sector, the folk sector, and the professional sector.** Each sector has its own ways of explaining and treating ill-health, defining who is the healer and who is the patient, and specifying how healer and patient should interact in their therapeutic encounter. An overview of the three sectors of health care in the UK will be described.

(a) The popular sector

The **popular sector** is the lay, **non-professional, non-specialist** domain of society, where ill-health is first recognized and defined, and where health care activities are initiated. It includes all the therapeutic options that people utilize without any payment and without consulting either folk healers or modern health care professionals. Among these options are: **self-treatment** or self-medication; advice or treatment given by a relative, friend, neighbor or workmate; or consultation with another lay person who has special experience of a particular disorder, or treatment of a physical state. In this sector, the main arena of health care is the family; here most ill-health is recognized and then treated. It is the real site of primary health care in any society. In the family, Chrisman (1977:351-371) explains that the main

providers of health care are women, usually mothers or grandmothers, who diagnose most common illnesses and treat them with the materials at hand. The role of elderly women in health care has been recognized as being of two kinds: those who possess a combination of ritual and magical expertise and herbal knowledge that enables them to deal with minor problems that are not considered to be potentially lethal, and those whose knowledge of *muso* ("malevolent magic") enables them to cause and cure life-threatening illnesses (Counts, 1991:283). It has been estimated (Kleinman, *et al.* 1978:251-258) that about 70-90% of health care takes place within the popular sector, in both Western and non-Western societies. Self medication is most commonly taken for fever, headache, stomach upset, indigestion, abrasions, coughs, sore throats, conjunctivitis, muscle aches, and various pains.

The popular sector usually includes a set of beliefs about health maintenance. These are usually a series of guidelines, specific to each cultural group, about the "correct" behavior for preventing ill-health in oneself and in others. These include beliefs about the "healthy" way to eat, drink, sleep, dress, work, pray, and generally conduct one's life. In some societies, health is also maintained by the use of charms, amulets, and religious medallions to ward off "bad luck," including unexpected illness, and to attract "good luck" and good health.

An important component of the popular sector is the wide range of self-help groups, such as those which have blossomed in the UK since World War II (Helman, 1990: 73). Like other parts of the popular sector, members' experience, it is not education which is important, but the experience of a specific misfortune. In 1982 a medical magazine (Pulse, 1982:51-52) listed 335 groups loosely labeled "self-help" in the UK or Ireland, and there are several other directories of groups available. According to Helman (1990: 73-74), these groups can be classified on the basis of why people join them, that is:

- Physical problems (British Migraine Association, Laryngectomy Clubs, Back Pain Association)
- Emotional problems (Depressives Associated, Phobic Society, National Schizophrenic Fellowship)
- Relatives of those with physical or emotional problems (Association of Parents of Vaccine Damaged Children, Adult Children of Alcoholics)
- Family problems (Family Welfare Association, Parents Anonymous, Organizations for Parent under Stress)
- Addiction problems (Alcoholics Anonymous, Action on Smoking and Health)
- Social problems including:
 - (a) sexual non-conformity (Lesbian Line, Gay Switchboards)
 - (b) one-parent families (Gingerbread. National Council for the Single Women and her Dependents)
 - (c) life changes (Pre-retirement Association, National Association of Widows)
 - (d) social isolation (Friends by Post, Solo Clubs, Meet-a-Mum Association).
- Women's groups (Women's Health Concern, Rape Crisis Centers, Mothers' Union)
- Ethnic minority groups (Asian Women Community Workers Group)

According to Levy (1982:1265-1275), most self-help groups have one or more of the following activities:

1. Information and referral

2. Counseling and advice
3. Public and professional education
4. Political and social activity
5. Fund-raising for research or services
6. Providing therapeutic services under professional guidance
7. Mutually supportive activities in small groups

A number of reasons for the growth of these groups in the popular sector has been explained by Robinson, and Henry (1977 as quoted by Helman, 1990:75), which include the perceived failure of the existing medical and social services to meet people's needs, the recognition by members of the value of mutual help, and the role of the media in publicizing the extent of shared problems in the community. Other reasons might be the **nostalgia for "community,"** especially the **caring community** of the extended family in an impersonal, industrialized world, as a coping mechanism for those with stigmatized conditions or marginal social status, and as a way of explaining and dealing with misfortune in a more personalized way (Helman, 1990:75).

(b) The folk sector

In this sector, which is especially large in non-Western societies, certain individuals specialize in forms of healing which are either *sacred* or *secular*, or a mixture of the two. These healers are not part of the "official" medical system, and occupy an intermediate position between the popular and professional sectors. There is a wide variation in the types of folk healer found in any society, from purely secular and technical experts, like bone-setters, midwives, tooth extractors or herbalist's, to spiritual healers, clairvoyants and shamans. Folk healers form a heterogeneous group, with

much individual variation in style and outlook, but sometimes they are organized into associations of healers, with rules of entry, codes of conduct, and the sharing of information (Helman:1990:59).

In most communities, one may find a mixture of sacred and secular folk healers. Spiritual healers, who may operate out of temples, churches, "cradle shops" or individual homes, are particularly common. These healers deal with illnesses believed to be due to sorcery (hexing) or to divine punishment. More secular illnesses are dealt with by self-medication or by neighborhood grannies or herb doctors.

An example of a purely secular healer is the "*sahi*," or health worker, as described by Underwood and Underwood (1981:271-297) in Raymah, Yemen Arab Republic. These healers have appeared in Yemen in recent years, and their practice consists mainly of giving injections of various Western drugs. They have little training (usually a brief association with a modern health care professional, in one case a month's work as a hospital cleaner), limited diagnostic skills, and they utilize little counseling or psychological skills. To the inhabitants of Raymah, however, the "*sahi*" practices what is considered to be the "quintessence of Western medicine the treatment of illness by injections." **Most folk healers share the basic cultural values and world view of the communities in which they live, including beliefs about the origin, significance, and treatment of ill-health.** In societies where ill-health and other forms of misfortune are blamed on social causes (witchcraft, sorcery, or the evil eye) or on supernatural causes (gods, spirits, or ancestral ghosts), sacred folk healers are particularly common. Their **approach** is usually a **holistic one**, dealing with all aspects of the patient's life, including relationships with other people, with the natural environment, and with supernatural forces, as well as any physical or emotional symptoms. In many non-Western societies all these aspects of life are part of the **definition of "health,"** which is seen as a **balance between man and his social,**

natural, and supernatural environments. A disturbance of any of these (such as immoral behavior, conflicts within the family, or failure to observe religious practices) may result in physical symptoms or emotional distress and require the services of a sacred folk healer (Helman, 1990:60). Healers of this type, when faced with ill-health, often inquire about the patient's behavior before the illness, and about any conflicts with other people. In a small-scale society, the healer may also have first-hand knowledge of a family's difficulties through local gossip, and this may be useful in reaching a diagnosis. As well as gathering information about the patient's recent history and social background, the healer may employ a ritual of divination. There are many forms of this world-wide, including the use of cards, bones, and special stones (the random arrangement of which is interpreted by the healer), the examination of the entrails of certain animals or birds, and direct consultation with spirits or supernatural beings by going into a trance. In each case, the divination aims to uncover the supernatural cause of the illness (such as witchcraft or divine retribution) by the use of supernatural techniques.

Trance divination is common in non-industrialized societies (but is also found in the West among "mediums" and "channellers"). The Zulu "*isangoma*," for example, is consulted by the relatives of a sick person, who remains at home. Her diagnosis is made by going into a trance and "communicating with spirits" who tell her the cause and treatment of the illness (Ngubane, 1981:361-365). Another form of this is the "*shaman*," who is found in many cultures. In Lewis's definition (Kimani, 1981:333), a shaman is "a person of either sex who has mastered spirits and can at will introduce them into his own body." Divination takes place in a seance, in which the healer allows the spirits to enter him, and through him diagnose the illness and prescribe treatment. This, and other forms of divination, sometimes take place in the presence of the patient's family, friends, and other social contacts. In this public setting, the diviner aims to bring to the

surface conflicts within a community which may have led to witchcraft or sorcery between people and to resolve these conflicts in a ritual way. Sacred healers also provide explanations and treatment for subjective feelings of guilt, shame or anger by prescribing, for example, prayer, repentance, or the resolution of interpersonal problems. They may also prescribe physical treatments or remedies at the same time.

There are several advantages of folk healing, for those who utilize it, compared to modern scientific medicine. One of these is the frequent **involvement of the family in diagnosis and treatment**. In particular, there is a shared world view, closeness, warmth, informality, and the use of everyday language in consultations; the family and other community members are involved in treatment; the *h'ilol* is a crucial figure in the community, and is believed to act for the benefit of the patient and the community; he can influence society at large, particularly the patient's social relationships; he can influence the patient's future behavior, by pointing out the influence of past actions on his present illness; and his healing takes place in a familiar setting, such as the home or religious shrine (Fabrega and Silver, 1973:218-223). Because folk healers such as the *h'ilol* articulate and **reinforce the cultural values of the communities** in which they live, they have advantages over Western doctors, who are often separated from their patients by social class, economic position, gender, specialized education and sometimes cultural background. In particular, these healers are better able to define and treat "illness," that is, the **social, psychological, and moral dimensions associated with ill-health**, as with other forms of misfortune. They also provide culturally familiar ways of explaining the causes and timing of ill-health and its relation to the social and supernatural worlds (Helman, 1990:1-62).

In general, folk healers have little formal training equivalent to the Western medical school. Skills are usually acquired by apprenticeship to an older healer,

through the experience with certain techniques or conditions, or by the possession of inborn or acquired "healing power." According to Helman (1990:62), people can become folk healers in a number of ways:

- Inheritance - being born into a "healing family"
- Position within a family, like the "seventh son of a seventh son" in Ireland
- Signs and portents at birth, like a birthmark or "crying in the womb," or being born with the amniotic membrane across the face (the "caul" in Scotland)
- Revelation - discovering one "has the gift," which may occur as an intense emotional experience during an illness, dream or trance. In extreme cases, as Lewis (1971:49-57) points out, the vocation may be announced by "an initially uncontrolled state of possession; a traumatic experience associated with hysteroid, ecstatic behavior"
- Apprenticeship to another healer - a common pattern in all parts of the world, although the apprenticeship may last for many years
- Acquiring a particular skill on one's own, like the Yemeni "sahi" or the Kenyan "bush doctors"

In practice, these pathways into folk healing tend to overlap; for example, someone born of a healing family and with certain signs and portents at birth may still need to refine his "gift" by a lengthy apprenticeship to an old healer.

Relationships between folk and professional healers tend to be marked by mutual distrust and suspicion. In some parts of the Western world, modern medicine views most folk healers as quacks, charlatans or "medicine men," who pose a danger to their patients' health. While folk healing does have

obvious shortcomings and dangers, it does have advantages to the patient, especially in dealing with psychological problems (Helman, 1990:63). Other advantages of traditional folk medicine for the under-doctored Third World have been recognized by the World Health Organization. In 1978 WHO recommended that traditional healing be integrated, where possible, with modern medicine and stressed the necessity "to ensure respect, recognition and collaboration among the practitioners of various systems concerned." The manpower resources that the WHO hopes to enlist in the folk sector include: traditional birth attendants (TBAs); ayurvedic medicine, yoga practitioners; Chinese traditional healers, such as acupuncturists; and various others.

(c) The professional sector

The professional sector comprises the organized, legally sanctioned healing professions, such as **modern Western scientific medicine**, or *allopathic medicine*. It includes not only doctors, physicians, dentists, psychiatrists, surgeons, pharmacists, but also the recognized paramedical professions such as nurses, physical therapists, occupational therapists, speech therapists, radiographers, medical laboratory scientist, health information administrators, social workers, and the like. Each of these categories offers some form of defined professional care, but they may also be called upon for informal advice about illness as part of the popular sector. In most countries, scientific medicine is the basis of the professional sector but, as Kleinman, *et al.* (1978: 251-258) notes, traditional medical systems may also become "professionalized" to some extent; examples of this are the 91 ayurvedic and 10 unani medical colleges in India, which receive governmental support. It is important to realize that Western medicine provides only a small proportion of health care in most countries of the world. Medical manpower is often a scarce resource, with

most health care taking place in the popular and folk sectors. This is reflected in the fifty facts from the World Health Report of 1995 (as quoted in The Journal of the Kuwait Medical Association, Dec. 1995:335-337) which is as follows:

(d) Fifty facts from the World Health Report

General

1. The world's population has more than doubled from 2.5 billion in 1950 to 5.6 billion today, including 4.4 billion in the developing world.
2. More than one-fifth of the global population lives in extreme poverty.
3. Life expectancy in one of the world's least developed countries is 43 years, compared to 78 years in one of the world's most developed countries.
4. Despite gains in overall life expectancy worldwide - a rise of 4 years to 65 years since 1980 - at least five countries will see their life expectancy rates drop in the next five years.
5. Half the world's population still lacks regular access to treatment of common diseases and to the most needed essential drugs.

Children

6. More than 12 million children under 5 years of age die in the developing world every year, most from a combination of preventable causes.
7. Each year more than 4 million children under 5 years die of acute respiratory infection, particularly pneumonia. This is equal to one death every 8 seconds.
8. Diarrheal diseases kill about 3 million children a year.
9. Measles kills about 1.2 million children a year.
10. Malaria kills about 1 million children a year.

11. More than half a million babies die each year from neonatal tetanus.
12. Up to 320 out of every 1000 babies do not reach their fifth birthday in some parts of the developing world, compared to only 6 deaths under 5 years per thousand births in some of the most developed countries.
13. More than 200 million children - almost a third of all the children in the world - are undernourished.
14. Breast-feeding could prevent the deaths of at least 1 million children a year.
15. It is estimated that by the year 2000, over 5 million children will be infected by HIV and another 5-10 million orphaned by the HIV/AIDs pandemic.
16. Global infant mortality has fallen by 25 percent since 1980, from 82 per 1000 births to 62 per 1000, while deaths among children under 5 have fallen from 115 per 1000 births in 1980 to 87 per 1000 births today.
17. The number of children under 5 dying from vaccine-preventable diseases - diphtheria, measles, neonatal tetanus, pertussis (whooping cough) and tuberculosis - dropped from 3.7 million in 1993. Eight out of 10 children in the world have been vaccinated against these diseases.

Adolescents

18. Pregnancy in adolescence carries a high risk of death or long-term complications. Maternal mortality rates at ages 15 to 19 are double the rates at 20 to 24, and the rates at ages 10 to 14 are 5 times higher in some countries.
19. Compared to other age groups, sexually transmitted diseases are most common in young people aged 15 to 24.
20. Studies in Latin America and the Caribbean show that 30-60 per cent of marriages take place in adolescence.
21. One smoker in two will eventually die because of a cigarette habit begun in adolescence.

22. Suicide rates among young people are rising more rapidly worldwide than in all other age groups. For every successful suicide in the developed world, some 40 adolescents attempt to kill themselves.

Adults

23. Of the world's 51 million deaths last year, 40 per cent were caused by communicable diseases.
24. Infectious diseases and parasites are the world's biggest group of killers, claiming 16.4 million lives each year.
25. Diseases of the circulatory system kill 10 million people each year, and are the largest cause of death.
26. Cancer claims 6 million lives each year, including 1 million due to cancer of the lungs and air passages. Worldwide lung cancer is the biggest single cause of cancer deaths in men.
27. Breast cancer is the main cause of cancer deaths among women in developed countries and the second cause in the developing world after cervical cancer.
28. The majority of cancer victims lives in the developing world and two-thirds of future cancer cases over the next 25 years will occur there.
29. Overall, smoking kills 6 people per minute. Smoking is the world's largest single preventable cause of illness and death. It already kills 3 million people a year and is expected to kill 10 million by the year 2020.
30. Ninety-nine per cent of deaths from communicable diseases and from maternal, perinatal, and neonatal causes occur in the developing world.
31. A pregnant woman in Africa is 13.5 times more likely to die in childbirth than one in Europe, while the mothers of more than half of the babies born in the least developing countries have no prenatal care.
32. Twenty million women undergo unsafe abortions each year and 70,000 die as a result.

33. More than half of the world's women now use a contraceptive method compared to fewer than 10 per cent in 1960.
34. More than 7000 adults die each day from tuberculosis, and there are over 1000 new cases every hour of every day.
35. Hepatitis B kills about 1 million people each year, but it is preventable by vaccine.
36. **Over 13 million adults, mainly heterosexual men and women, are infected with HIV.** Up to 60 per cent of infections in females are believed to occur by the age of 20. Some 6000 people become infected each day. By the year 2000 the cumulative total of HIV infections worldwide could reach 30 to 40 million.
37. In the next 5 years, AIDS will have killed more than 8 million people, most of them young adults, with women an increasing proportion of the total.
38. In the developing world, 1 in 2 deaths is caused by communicable disease, whereas in the developed world 3 out of 4 deaths are due to noncommunicable diseases, many of which are lifestyle-related, such as cancer or heart disease.
39. Hypertension, or high blood pressure, one of the major contributors to heart disease, stroke and kidney failure, affects 8 to 18 per cent of adults worldwide.
40. More than 100 million people will suffer from diabetes by the end of the century - 90 per cent of them with the form strongly linked to lifestyle habits, such as inappropriate diet and lack of exercise.
41. Some 500 million people suffer from neurotic, stress-related and somatoform disorders, and another 200 million from mood disorders, such as chronic and manic depression.
42. In Africa, where 9 of 10 deaths from malaria occur, the social and economic costs of the disease have reached \$2 billion a year.
43. Schistosomiasis, or snail fever, affects 200 million people in 74 countries. The cost of treatment - although only 30 cents per patient - is too expensive for widespread use in many of the most affected countries.

44. River blindness, or onchocerciasis, a parasitic disease, infects 18 million people in 34 countries of Africa and Latin America.
45. Every day about 600 people die, and another 33,000 are injured because of unsafe working conditions. Worldwide, 90 per cent of workers have no access to occupational health services.

Elderly

46. The number of people in the developing world aged over 65 will increase by between 200 and 400 per cent during the next 30 years.
47. Studies of elderly people in many countries show a high prevalence of such chronic diseases as stroke, dementia, and cancer.
48. Dementia, particularly Alzheimer's disease, affects at least 22 million people globally, including one in every 5 aged over 80.
49. At least 165 million people in the world, most of them elderly, are estimated to have rheumatoid arthritis.
50. **One in 3 women over 50 have osteoporosis (thin bone disease) and so stand a much-heightened risk of bone fractures.**

2.3.3.1.2 Metaphors of illness

In both the urban and rural areas of modern industrial society, a large number of folk illnesses still persist, many of them largely untouched by the medical model and still rooted in traditional folklore. In addition, certain serious and **life-threatening diseases** (such as **cancer, AIDS or rheumatoid arthritis**) have also become "folk illnesses," though of a particularly powerful type. These diseases, for which there are no cures for the moment, come to symbolize

many of the more general anxieties that some individuals have, such as a fear of the breakdown of ordered society, or of invasion, or of divine punishment. In the mind of many in the population, these diseases become more than just a clinical reality: they become “**metaphors**” for many of the terrors of daily life (Helman, 1990:99).

In the **Middle Ages**, epidemic diseases such as **plague** and **leprosy** were the **metaphors for social disorder**, and the breakdown of social, religious, and moral order. In the past two centuries, tuberculosis, syphilis, and cancer have all been used as more contemporary “**metaphors for evil.**” In the twenty-first century **cancer** and **AIDS** will probably be described in the media and literature as a type of unrestrained and chaotic evil force, unique to the modern world which is composed of cells “without inhibitions,” which destroy the natural order of the body and the society in which the individual lives.

2.3.3.1.3 Comparison of the medical systems

In understanding any **medical system**, one must always see it in the context of the **basic values, ideology, political organization and economic system of the society from which it arises**. In that sense, the professional sector of health care, like the popular and folk sectors, is always to some extent “culture-bound” (Helman, 1990:66).

The culture-bound aspects in the case of modern medicine, can be illustrated by comparing the medical systems of different Western countries with similar levels of economic development (Helman, 1990:66). Western countries such as the UK, Germany, Italy, France, and Spain vary in whether health care lies mainly in the private or the public sectors, in the distribution of medical resources, in their arrangement for health insurance, and so on; but their professional sectors are all rooted in the same tradition of Western

scientific medicine, and there is considerable exchange of medical data and techniques between them.

Various studies have illustrated significant differences in the types of diagnosis given, and the treatment prescribed, among different Western medical systems. For example, a study carried out in 1984 on "Patterns of European Diagnoses and Prescribing" in five different European countries, found marked variations between them, which could not be explained solely by disparities in the health of their populations (O'Brien, 1984). This study examined the 20 leading diagnostic categories and 20 leading types of drug prescribed in each of these countries. In the UK, for example, the major group of drugs prescribed was the tranquilizers, hypnotics, and sedatives (8.6% of the total number of prescriptions), compared with 6.8% in France, 6.0% in Germany, 3.1% in Italy and 2.0% in Spain. In the UK, "neuroses" were among the commonest of diagnoses (5.1% of the total number of diagnoses given), compared with 4.1% in France, 3.2% in Italy, and 1.7% in Spain. These differences may represent not only differences in morbidity among the five countries, but also major differences in nomenclature, in the criteria of diagnosis, and in cultural attitudes towards certain types of behavior and how they should be dealt with.

Having discussed the relation between man and his fellowmen, we can understand that there are differences in understanding and interpreting approaches to treatment, such as the popular, folk and professional sectors. In addition we note that even among developed and modern countries there is a difference in the understanding of the disease process and its treatment.

2.3.4 MAN AND THE TRANSCENDENTAL

According to Wielemans and Chan (1992:26), it is only during recent centuries in Western countries that a change from mainly religious-based principles to secular-rational values has brought about a profound crisis in faith and a renewed search for the meaning of life. **Secularization is marked by the decline of the influence of religion on people's lives.** Freedom of opinion and behavior is being advocated. The new emphasis is on science and on this world, rather than on the supernatural; the emphasis is on facts and effective behavior rather than on belief.

The concept of **"mind-body dualism,"** in the delivery of health care can be traced back to Descartes in the seventeenth century, who divided man into "body" (to be studied only by science), and "mind" or "soul" (to be studied by philosophy and religion) (Helman, 1990:89). Descartes introduced the **strict separation of mind and body,** along with the idea that the body is a machine that can be understood completely in terms of the arrangement and functioning of its parts. "A healthy person was like a well-made clock in perfect mechanical condition, a sick person like a clock whose parts were not functioning properly" (Capra, 1982:138). The principal characteristics of this biomedical model, as well as many aspects of current medical practice, can be traced back to the Cartesian imagery. The clinging to the mechanistic world view has brought us dangerously close to destruction. These ideas are now obsolete and it is important to have a new vision.

Engel (1980:535-544) sees the focus of modern medicine on the physical dimensions of illness as further evidence of **"mind-body dualism,"** a way of medical thinking which focuses on identifying physical abnormalities, while often ignoring **"the patient and his attributes as a person, a human being;"** reducing him, that is, to a set of abnormal physiological parameters. In

contemporary times, the mind is handed over to psychiatrists and behavioral scientists to study, while the body is handed over to medical science and its diagnostic technology, so that in modern medicine, the basic dualism still remains.

The **spiritual dimension** is a difficult concept to understand because of its **relation to the unknown**. However, it is important to try and understand this concept which has been ignored in modern health care delivery and which is beginning to demonstrate its significance.

2.3.4.1 Definition of Spirituality and Spiritual Health

Hoyman (1961:253) defined spiritual health as “optimal personal fitness for full, fruitful, and creative living,” and he established three dimensions to health: physical fitness, mental health, and spiritual faith. He also stated, “Faith is not a matter of the spiritual side of man in isolation, but is the centered movement of the whole person toward something that has ultimate meaning and significance for him” (Hoyman, 1961:259).

Banks (1988:199-202) conducted one of the few empirical studies to date to define the spiritual dimension of health and the extent to which the **spiritual dimension ought to be incorporated in health education professional preparation**. By surveying health education experts (including doctoral candidates because she felt they would theoretically be leaders in the field in the next 25 years) and students about their perceptions of the spiritual dimensions, she made three observations:

First, the spiritual dimension can be perceived as a unifying force within individuals which integrates all other dimensions (physical, mental, emotional,

and social) and therefore plays a vital role in determining the state of well-being of the individual. The individual must be viewed as a whole, so what affects one dimension will affect all the other dimensions. This spiritual dimension may be thought of as a central core which is the grounding source for all the other dimensions.

Second, one major component of the **spiritual dimension** has to do with **what the individual identifies as meaningful and purposeful in life**. What an individual selects as meaningful in life is of a highly personal nature; however, it may serve as an inner drive for that individual's life accomplishments. The basic needs or wants of individuals usually include the "want to live," and this could be considered part of this aspect.

Thirdly, this **spiritual dimension** is somewhat different from most of the other known dimensions of human beings (physical, mental, and emotional) in that it **transcends the individual**, thus it has the capacity to serve as a common bond between individuals. Components which could be placed in this aspect of the spiritual dimension would include: **commitment to God** or a concern for cosmic forces; the **sense of selflessness** and a feeling for others; and a set of principles or ethics which govern our conduct. This common bonding aspect can be described as a force which begins in the individual and then goes beyond that individual in an attempt to share warmth/love/compassion with another. This could be perceived as the "caring center" within individuals.

Banks (1988:202) concludes that the **spiritual dimensions are obscure and difficult to measure**. This conclusion surely arises from the personal nature of spirituality which is defined by an individual's perceptions of the cosmos and what causes the universe to work. Spirituality includes a faith in and recognition of powers beyond the natural and rational and may or may not include one's religious beliefs.

Many definitions of spirituality have been suggested by various health care professionals and religious leaders to substantiate further the viability of a separate spiritual dimension to health. Pilch (1988, as quoted by Goodloe and Arreola, 1992:222-223) concluded that spirituality is one's response to life experiences based on **spiritual values or religious beliefs**. Anyone, even the **terminally ill, mentally retarded, or physically disabled, is capable of formulating a spiritual response to life.**

Significant spiritual characteristics cited by Poehler (1982, as quoted by Goodloe and Arreola, 1992:222) included loving one's neighbor as self and one's self as neighbor, transcending the other dimensions of health, and manifesting a concern for some one greater than oneself. In addition, the spiritual dimensions of health and the presence of a personal spiritual reality enabled the other dimensions of the person to become more fully integrated.

Leean (1988, as quoted by Goodloe and Arreola, 1992:223) noted that the most common principle among various definitions of the spiritual dimension was the idea of self-transcendence, the recognition of an inner self, God,voice of the Creator, or spiritual reality. She made two observations about spirituality: (1) people's quest for this transcendence often leads to deception when that which they sought was idolatrous, not spiritual; and (2) if internalized religious convictions are a part of one's spirituality, there must be an element of reflection upon these principles. If not, its essence would become distorted.

Thus, there seems to remain a doubt about the credibility of the spiritual dimension in health. The arguments are as follows: (1) spiritual health may be defined but cannot be researched and, therefore, cannot be a legitimate area of study; (2) spirituality is a part of the mental/emotional/psychological dimension of health and does not need to be recognized as a separate entity within the training

of the health care professional; and (3) a recognition of spiritual health implies a recognition of religion and /or religiosity, which raises the issue of the separation of church and state in all aspects of education, including medical education.

It is interesting to note that the influence of modern medicine can be explained by the first relation-axes, which is man and himself. Attention is on the individual "selves," in "the survival of the fittest," in contrast to man and fellowmen, man and nature, and man and the transcendental. Nature is seen as matter which has to be manipulated predominantly in a permanent struggle for survival. It is in this image of man that has led to many critics of modern medical systems.

2.4 CRITICS OF THE MODERN MEDICAL SYSTEMS

There are many critics of modern health care delivery systems, most of whom are from developed countries such as the USA and UK. They include Rosch and Kearney, (1985:1405); Stacey, (1988:177-193); Illich(1976); Crawford, (1977); Capra, (1982); Pereira, (1993); Helman, (1990:65-66) and Anyinam, (1990:71). Some of their critiques of modern health care delivery systems are discussed below:

- In European countries, the period since 1980 has witnessed a vast research effort seeking to monitor and explain why people care about social justice in the field of health and health care (Pereira, 1993:19).
- The high cost of medical care in the United States now represents a grand total of \$287 billion a year - a sum greater than the combined total of the

U.S. national defense budget and the annual sales of all automobiles in the US (Rosch, and Kearney, 1985:1406).

- The costs of collective nuclear madness is staggering. In 1978, before the latest escalation of costs, world military spending was about 425 billion dollars - over one billion dollars a day. More than a hundred countries, most of them in the **Third World**, are in the business of buying arms, and sales of military equipment for both nuclear and conventional wars. These are larger than the national incomes of all but ten nations in the world. In the meantime, more than **fifteen million people - most of them children - die of starvation each year**; another **500 million are seriously undernourished**. Almost 40 percent of the world's population has no access to professional health services; yet developing countries spend more than three times as much on armaments as on health care. Thirty-five percent of humanity lacks safe drinking water, while **half of its scientists and engineers are engaged in the technology of making weapons** (Capra, 1982:2).
- There is an **increasing reliance on sophisticated technology** in areas of diagnosis and treatment which have all tended to **increase the process of "dehumanization" and "depersonalization"** of the physician-patient relationship.
- Disenchantment with scientific medicine is also reflected in an increase in malpractice cases (Anyinam, 1990:71), where health-care-professionals and patients need to be constantly on guard against one another.
- Many reimbursement systems recognize only procedural services on the cognitive and psychomotor domain, but not on the affective domain. **Health care professionals are reimbursed for "doing" (objective measurements)** something to the patient, such as performing blood tests, taking X-rays, examining and treating the body, conducting surgical procedures, but **receive no remuneration for feeling, caring, or demonstrating empathy**, which are essential aspects of health care.

Compensation is based on objective services which can be quantified and assigned a specific monetary value, but not for subjective services such as listening, counseling, empathy, or caring.

- Health care professionals must keep abreast of rapidly growing technological advances and computerized techniques, with a resulting decrease in time for patient interactions, which further depersonalizes the patient - health-care-professional relationship.
- A trend towards specialization and subspecialization in medicine, and a compartmentalization of patient care increases the quantity of medical care in terms of specialists seen, diagnostic procedures performed, and various blood tests administered, but decreases the quality of direct health-care-professional - patient personal interaction.
- There is now a “wellness revolution” which is orientated towards health enhancement, and illness prevention rather than the treatment of disease processes. Accompanying this is an increasing appreciation of the **important role of stress and psychological factors in health and illness which influence the quality of life.**
- There is a growing wariness on the part of the public about the long-term and unknown side effects of medications, (e.g., problems with thalidomide), as well as the use of a variety of other drugs (e.g., contraceptive drugs) because of their side effects, despite presumed adequate investigation.
- **Illhealth** in Western society, may be caused by other factors, such as **poverty, unemployment, economic crises, pollution or persecution**, and are **often ignored by the medical system** because its main focus is increasingly on the individual patient and the “risk factors” in his or her own lifestyle (Crawford, 1977:663-680).
- Other critics of the medical system have maintained that modern medicine, while controlling micro-organisms, also seeks to control the behavior of the population, especially by “medicalizing” both deviant behavior and many of the normal stages of human life-cycle. Stacey (1988:229-260) and others

have suggested that this phenomenon is particularly evident in the case of women, especially during pregnancy and childbirth.

- Critics of the medical systems in the USA and the UK have pointed out how the internal organization of the professional sector reflects some of the basic inequalities in those societies, especially in relation to gender, social class, and ethnic background. Within the medical system most doctors are men and, as in the wider society, occupy many more of the prestigious, powerful and well paid jobs than do women doctors and nurses (Stacey, 1988:177-193). Also, the personnel within this sector are arranged in hierarchies similar to the social strata of the wider society. In its dealings with the population, the medical system may reproduce many of the underlying prejudices of society, as well as cultural assumptions as to what constitutes “good” and “bad” behavior.
- Western medical system critiques include those by Illich (1976), who claims that high-technology modern medicine has become increasingly dangerous to the population’s health by reducing their autonomy, making them dependent on the medical profession, and damaging their health by the side-effects of drugs and surgical interventions. In addition, the medical system is in a symbiotic relationship with the manufacturers of pharmaceuticals and medical equipment, and this relationship is not necessarily in the patient’s interest.

2.5 CONCLUSION

In this chapter, health and illness in context with particular reference to the modern (Western) view of medicine and its implications for the system of training health care professionals is discussed according to the relation-axes model introduced by Wielemans and Chan (1992:19-38) which provides a theory of man concerning himself, man and fellowmen, man and nature, and man and the

transcendental. The modernization theory; together with the concept of acculturation, culture, cultural identity and core values; educational socialization and core curriculum is reflected upon. Lastly, the author discusses critiques of modern medicine in terms of the delivery of health care and the training of health care professionals.

There is considerable evidence that the modern Western self seeks not only mastery over its body and mind, "but over all other aspects of the other" (Wielemans and Chan, 1992:23). The word "other" is used as an epitomized expression in explaining 'the struggle against the nature,' 'the survival of the fittest,' and in the **assumption that competition is a 'natural' and therefore legitimized in social behavior** (Wielemans and Chan, 1992:23).

The Western attitude towards nature and society is colored by a desire to control and exploit, even in the health care setting. There is no longer an attitude of humility and respect towards the patient in need. Thus, in Western societies **attention is on the "individual selves"** in contrast to man and fellowmen, man and nature and man and the transcendental. Nature is seen as matter which has to be manipulated predominantly in a permanent struggle for survival. It is this image of man which forms the basis of understanding "**industrial mentality**" according to the relation-axes model.

Thus, modern medicine appears to be at a crossroads. It is essential, yet it is criticized because of its primary impact on the changing relationships between health care professionals and patient, and the methods of delivery of health care. To a large extent, these issues are intertwined and in turn are dependent upon a host of other factors such as:

Increasing patient education about medical problems in the developed world, as well as subjects such as nutrition, exercise, and stress reduction, that focus primarily on areas of preventive medicine and health enhancement. In some

instances, the patient may be as knowledgeable or even more knowledgeable than the health care professional.

The closely allied area of “holistic medicine” which is praiseworthy in terms of its orientation towards the treatment of the whole individual with naturopathic approaches, but at the same time has attracted a variety of entrepreneurs and even charlatans because of its popularity and imprecision.

Many health consumers in industrialized societies are therefore growing wary of biomedicine (Anyinam, 1990:71). The practice and use of alternative medicine can no longer be ignored by those interested in the patient and the health care delivery system. Besides, “the health care behavior of consumers suggests that medical pluralism is not a feature characteristic only of Third World societies” (Anyinam, 1990: 75). Thus, systematic investigation of the spatial dynamics of alternative approaches to health and healing could help fill numerous existing lacunae in the research literature.

The two major recent trends in modern medicine, **holism and technology**, appear to be mutually exclusive and to exist in a **fragile alliance** at best. However, there are reasons to hope that the benefits of both to health care professional and patient need not be contrary. It may well be that the future of medicine will lie in the **happy synthesis** of the seemingly disparate approaches to patient care: **the art of healing and the science of medicine**.

CHAPTER THREE

HEALTH AND ILLNESS IN CONTEXT WITH PARTICULAR REFERENCE TO ISLAMIC MEDICINE, MORE SPECIFICALLY KUWAIT, AND IT'S IMPLICATIONS FOR TRAINING OF HEALTH CARE PROFESSIONALS

3.1 INTRODUCTION

The aims and functions of any education, especially medical education, are integrally related to the concept of man and himself, man and fellowmen, man and nature, and man and the transcendental. In addition, it **should be related to the purpose of human existence** to understand the goal and destiny of mankind. The Islamic and modern secularist approaches are fundamentally different in these spheres. "They seem to meet and coalesce occasionally in external peripheries, but their roots are different and antagonistic" (Ashraf, 1987:4).

If we reflect on the modern day problems in health care, we realize that it is a striking sign of our time that the people who are suppose to be experts in various fields can no longer deal with the urgent problems that have arisen in their areas of expertise. Doctors and other health care professionals are confused about the causes of AIDS and cancer, psychiatrists are mystified by schizophrenia, police are helpless in the face of rising crime, and the list goes on. "This intellectual elite has formulated the 'mainstream academic view' and generally agreed on the basic conceptual framework underlying its advice. Today this consensus no longer exists" (Capra, 1982:5-6).

In this chapter the author defines the meaning of Islam; reflects on the concept of Islamic medicine; discusses general information about Kuwait; describes medieval Islamic medicine; and reflects on problems encountered by attempting to modernize medical education in Kuwait, using the relation axes model. Early on in the first chapter the author alerted the reader to the fact that the history of Islamic medicine is still imperfectly understood because of the vast amount of poorly edited and unpublished medical material in oriental languages that remains to be studied (Ibn Ridwan, 1984:vii)

The concept of Islamic medicine or Islamic health sciences and its administration in health education and promotion is probably unfamiliar to the majority of health care professionals, even among some Muslims. An important dimension often overlooked or insufficiently appreciated by historians of Islam, is the impact of the cosmopolitan nature of the Islamic civilization and culture on the development of science and medicine, especially on the latter (Rahman, 1984:594).

When reflecting on the meaning of Islam and Islamic medicine, we may understand some of its influences for the training of health care professionals in Kuwait. We need to address this problem in its wider context, which includes the cultural identity, core values, belief systems, emotional support from family and friends, and many other circumstances which have an influence both in the delivery of health care, and in the training of health care professionals in Kuwait. Again the author would like to remind the reader that this research is not only aimed at extolling the virtues of the Islamic religion but at discussing matters which concern all cultures, both in the developing world and the developed world, which have been and are subjected to the modernizing influence of Western medicine.

3.1.1 The meaning of Islam

The religion of Islam means “submission to the will of Allah.” Islam was the religion of Adam, Noah, Abraham and other prophets up to Muhammad (peace and blessings of Allah be upon them), for their faith was one and the same, although the applied ethics might be different (Masri, 1996:11-12). The Islamic faith consists of six fundamentals (Masri, 1996:12):

1. Belief in Allah.
2. Belief in His Angels.
3. Belief in Divine Books.
4. Belief in His Prophets.
5. Belief in the Last Day.
6. Belief in Divine Destiny.

3.1.2 What does the word Islam mean?

“Islam” is an attribute title, whosoever possesses this attribute, may he belong to any race, community, country, or clan, is a Muslim. According to the Qur’an (the Holy Book of the Muslims), among every people and in all ages there have been good and righteous people who possessed this attribute - and all of them were and are Muslims. Islam teaches that Allah created the universe with a single command - “Be!”. His creation, both human and non-human is not chaotic but it has an inner order and purpose beyond human understanding or questioning. All nature is under the command of Allah, as in every aspect of human life. A Muslim attempts to live his

life as ordered by Allah, accepting His control of everything he does at every moment of his life.

“Islam” is an Arabic word and connotes submission, surrender, and obedience. As a religion, Islam stands for complete submission, surrender and obedience to Allah (God). The word Allah is used instead of God because there is no female equivalent to Allah, like there is in English for God being goddess. Another literal meaning of the word “Islam” is ‘peace’ and this signifies that one can achieve real peace of body and mind only through submission and obedience to Allah. Such life of obedience brings in peace of the heart and mind and establishes real peace in the society at large.

The concept of submission in Islam is misunderstood by many people including some Muslims. Worship is commonly taken to mean performing ritualistic acts such as prayers, fasting, charity, fulfilling the obligation of pilgrimage, etc. This limited understanding of submission is only one part of the meaning of worship in Islam. That is why the traditional definition of worship in Islam is a comprehensive definition that includes almost everything in any individual’s activities. In other words, worship is everything one says or does for the pleasure of Allah. This, indeed, includes rituals as well as beliefs, social activities, and personal contributions to the welfare of one’s fellow human-beings. Thus, Islam is a universal religion and its objective is to create and cultivate in man the quality and attitude of Islam.

3.1.3 What is Islamic medicine?

There are many interpretations of the term Islamic medicine, according to Iqbal (1982:362), who mentions that although it is often difficult to procure evidence upon which a definite answer to the numerous facets of progress of human advancement can be based. However, it is in general acceptance that **advancement in knowledge is achieved through a process of continuous occurring of data from all available sources at different times.** What is termed Islamic Medicine may be considered to be essentially an amalgam of philosophical theorems and numerous materia medica that had prevailed or were available in areas around the Mediterranean and adjoining countries of Asia [Chapter 3. (3.7.2.1)].

With the unparalleled progress that accompanied Islam, the Arabs chose to develop their medical heritage based largely upon the accumulated data available within the Greek system of medicine. Islamic Medicine did not grow wholly upon Arab soil nor were all great Islamic physicians Arabs. **Islamic medicine is better considered as a cultural force which absorbed many different currents within itself and having integratedly developed them.**

Islamic medicine also known as Arabic medicine drew heavily on the knowledge of the ancient Greeks (Hippocrates, Aristotle, Galen etc.) through manuscripts left behind by them which were made accessible by their being translated into Arabic, either directly or from first translations into Syriac (Wright, 1996:19). Indeed, this age of translation made available manuscripts from other regions such as India, Persia and to a lesser extent China as well. The writings on Islamic medicine were overwhelmingly set down in Arabic. Even those who were not Arabs (such as the Jew, Ibn Maimun, or Maimonides) made use of it.

The roots of Islamic medicine extend back to the seventh century when Khalid bin Yazid (655-704 AD) began to acquire translations of Greek manuscripts from Alexandria which fell to the Arabs in 641 AD when Islam expanded into Egypt (Wright, 1996:19)

The major source of expertise and knowledge took place in a city called, Jundi-Shapur (near present-day Ahwas in southwest of Iran) to which the Nestorians had fled to escape persecution from Byzantium. They and other savants had made Jundi-Shapur the prime repository of Greek knowledge, and this began to be tapped when the caliph al-Mansur enticed Jurjis bin Jibra'il Bukht Yisa to come to Baghdad in 765 AD. The territory of Mesopotamia was first invaded by Muslim armies under the first Caliph, Abu Bakr, in 633 AD. This had led to the conquest of the Sassanids in Persia shortly afterwards, and gave the Muslims early access to Jundi-Shapur as well (Wright, 1996:20).

The fact that the inhabitants of Jundi-Shapur as well as other eminent savants enticed to Baghdad were accomplished linguists is of pivotal importance. It opened the gates of knowledge to the Empire of Islam and made the Arabic language the prime repository for works on medicine, science, astronomy, technology, philology, philosophy and indeed learning in general.

According to Islamic teaching, God has made available a treatment for every illness, He has created (Al-Bukhari, LXX1). This teaching implies that every available and useful treatment known to us should be utilized, and that if a treatment for a certain illness is not yet known to us, it is our duty to search for it until we discover it. Thus, the very act of scientific research encompasses Islamic Medicine.

Islamic Medicine is not limited to any branch of the healing arts, the treatment in question may be spiritual or physical exercise, nutritional

adjustment, pharmaceutical preparation, be it all natural ingredients or purely synthetic, surgical procedures, radiation therapy, or a combination of any of these modalities.

In order to establish a theoretically sound model for investigating some of the influences of Islamic medicine for training of health care professionals in Kuwait, it is important to understand the world of Islam, more specifically Kuwait, including the views on medicine and the training in medicine. In this particular study, Kuwait will be used as an example, to compare Modern and Islamic Medicine: some implications for training health care professionals in Kuwait. Thus, the author will first introduce the country Kuwait in general, the education system with specific reference to health care system, and the training of health care professionals, before focusing on the relation axes model.

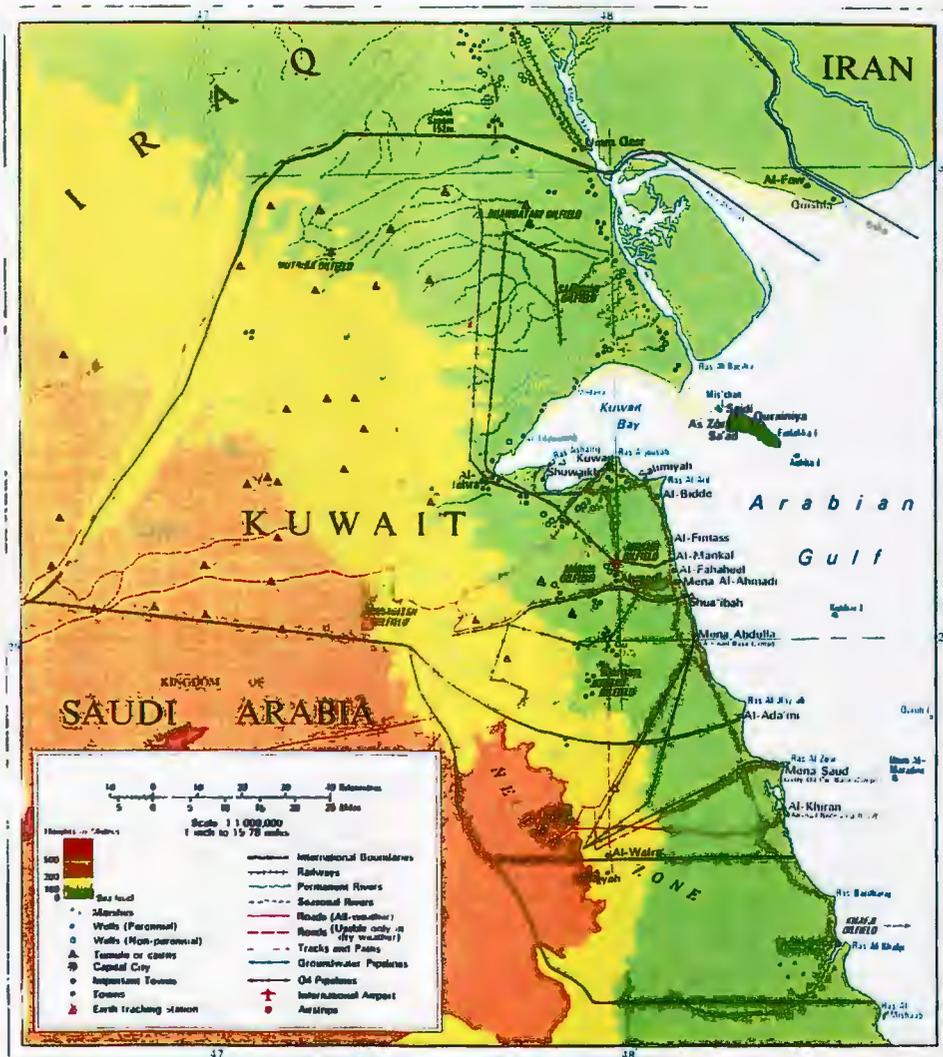
3.2 GENERAL INFORMATION ABOUT KUWAIT

3.2.1 The State of Kuwait

3.2.1.1 Location and area

The State of Kuwait lies on the north-east shore of the Arabian Peninsula, bordered in the east by the Arabian Gulf, in the north by Iraq, and southwesterly by the Kingdom of Saudi Arabia.

FIGURE 3.1 THE MAP OF KUWAIT



The total area of Kuwait is approximately 18000 square kilometers, and its population is about 1.8 million. The surface of the land is formed of stretching sand valleys and a few separate hills. The most prominent natural feature is in *Wadi al-Batin*, which lies in the north-west of the country and whose center forms the Kuwait-Iraq boundary.

3.2.1.2 Kuwait's Islands

There are nine islands off the coast of Kuwait: Auhha, Bubiyan, Failaka, Kubbar, Miskan, Qaruh, Umm Al-Maradim, Umm Al-Naml, and Warba.

Auhha: It lies to the south of Failaka Island.

Bubiyan: Located in the northeast of the Arabian Gulf, it is the largest island in area (863 square kilometers) and is linked to the mainland by a prestressed concrete bridge.

Failaka Island: The island of Failaka is the most beautiful and most famous of Kuwait's islands. It combines the ancient history of Kuwait, when the early "Utubs" settled in after their long journey, prior to their settlements on Kuwait's mainland in the late seventeenth century.

Kubbar, Qaruh, Umm Al-Maradim: They lie at the southern side of the Gulf. Large flocks of sea-birds used to live there, but regular visits to the island by people fond of shooting and swimming have caused a significant decrease in their number.

Miskan: It lies to the north of Failaka Island.

Umm Al-Naml: It is located in the mouth of Kuwait Bay. Many Islamic antiquities were found there. Near it was Akkaz Island, which has now been assimilated into the warehouses of the Port of Shuwaikh.

Warba: Located at the northern extremity of the Gulf, it occupies an area of 37 square kilometers.

The island of Failaka is of special interest to Kuwaitis. Apart from its historical importance as a land of relics and ancient civilizations, it had become a modern tourist attraction, keeping abreast with all aspects of modern progress. Everyday, before the Iraqi aggression, visitors were carried from the mainland at *Ras Al Ardh* (Salmiyah) to the island by ferry boats belonging to Public Transport Company, to relax and swim in its crystal clear waters. Today it is not unusual to find landmines on this island and other areas, after the Iraqi invasion of Kuwait. There are a number of patients still being referred to hospitals in Kuwait because of the injuries caused by landmines.

FIGURE 3.2 THE RUINS AT FAILAKA ISLAND



3.2.1.3 Amir of Kuwait

The Amir is the head of the State, he is referred to as His Highness Sheikh Jaber Al-Ahmed Al-Jaber Al-Sabah. The Constitution states that the Amir assumes his authority through his ministers. The Prime Minister and Ministers are collectively responsible to the Amir for the general policy of the State and each Minister is responsible for his own Ministry. The Amir is the Supreme Commander of the Armed Forces.

**FIGURE 3.3 THE AMIR OF KUWAIT
SHEIKH JABER AL-AHMED AL-JABER AL-SABAH**



Kuwait is an hereditary Emirate, the succession to which shall be through the descendants of the late Mubarak Al-Sabah. The Amir of the State of Kuwait and the powers vested in him with regard to vital and strategic issues, include many matters of public interest that fall directly under his supervision. He is

the President of some prestigious organizations, foremost among which is the Kuwait Foundation for the Advancement of Sciences (KFAS). Despite his numerous official duties, the Amir is very conscious of the importance of his personal relations with his citizens, sharing with them their joys and sorrows.

3.2.1.4 Crown Prince

The present Crown Prince of Kuwait, is Sheikh Saad Al-Abdallah Al-Salem Al-Sabah who was appointed as Crown Prince on 31 January 1978 and Prime Minister on 8 February 1978. In his dual capacity, he is President of the Supreme Defense Council, the Supreme Petroleum Council, the Civil Service Commission and the High Housing Council. He is the eldest son of the late Amir of Kuwait, Sheikh Abdallah Al-Salem Al-Sabah.

**FIGURE 3.4 THE CROWN PRINCE OF KUWAIT
SHEIKH SAAD AL-ABDALLAH AL-SALEM AL-SABAH**



3.3 THE HISTORY OF KUWAIT

The region of Kuwait was known earlier as *Kazima* till beginning of the seventeenth century. This port which is known by the same name lies in the northwestern part of Kuwait Bay. The said urban center then moved to the south of the Bay and was known as *Qurain* and later Kuwait (Ministry of Planning, Kuwait, 1995:15). The name Kuwait is derived from the word "KUT," which means castle or little fort, which shows the insignificance of the place at the early stages of its history (Abu-Hakima, 1983:1).

Historical manuscripts and data show that the beginning of Kuwait City was in the year 1613 AD, when a group of families and tribes began to arrive in this region as immigrants from Najd, insightfully realizing the importance of this position and the advantages of its location (Ministry of Planning, Kuwait 1995:15).

According to Lambert and Lambert (1992:11), the early history of Kuwait dates back to about 1700-1716. However, these dates are challenged by traditional Kuwaiti historians, who believe that the city was in existence somewhat earlier. Regardless of the exact date historians set for the history of Kuwait City, the facts surrounding its establishment remain undisputed. Severe famine and drought plagued the interior of the Arabian Peninsula which forced a group of tribesmen to migrate and eventually settle on the bay of Kuwait. The nomadic Arab tribesmen and their families were forced to leave their tents and makeshift homes, with their camels and goats in tow, in search of a new beginning. Among these nomadic *Bedouin* (desert dweller) tribes were the *Utabs*, a division of the *Al-Aflaj* region of the *Najd*, the area now known as Saudi Arabia. The leading family of these immigrants was from the *Anaizah*

group called the Sabah. They negotiated a formal independence from the Ottoman Governor in Mesopotamia.

The cultural history of Kuwait dates back considerably further as has been discovered. The most significant early references to Kuwait can be found in a Greek historical account of a voyage of Alexander the Great's Admiral Nearchos. Nearchos sailed up the Gulf on his way to India. On route he stopped at an island called *Ikaros*. This island has been identified as Kuwait's modern day Failaka Island, where recent excavations have uncovered proof of a Greek trading colony, active from the third to the first century BC. These excavations of Failaka Island unearthed an ancient Temple of Artemis, military fortifications and well-planned dwellings and workshops. Other findings on Failaka Island include stone seals from the late Bronze Age (c.3000-2100 BC), which indicate human presence long before the Greeks arrived (Lambert and Lambert, 1992:12). Failaka used to be a stop for the commercial vessels that link the ports lying on the Gulf tip and its southern ports on their way to Oman, India, and eastern Africa.

Kuwait is one of the smallest but also one of the richest countries in the world. Until oil was discovered there in 1938, it was a little known Arab state under the rule of an Arab sheikh (Peretz, 1961-1965:305). Its tiny population made a living from boatbuilding, fishing, and pearl fishing. Use of mud and sea rocks were the basic substances for building houses and government buildings. There were no paved streets, no electricity, no high buildings and no radio stations. There was a lack of comforts in the Kuwaiti's daily life in those days with no profound protection against sickness or epidemics (Freeth and Winstone, 1972:49).

3.3.2 Public Authority for Civil Information

3.3.2.1 The Civil Identity Card

The Civil Identity Card is an official document to confirm the citizen's, as well as the resident's, identity and help in finalizing matters in the various State ministries and establishments. The Civil Identity Card includes information on its bearer's name, address, nationality, birth date, residence number and the expire date (in case of residents), and blood group.

Any national or resident without a Civil Identity Card is subject to the penalty provided for in Article 33 or Law No. 32/82 pertaining to the civil information system. In case of any change in address, the old Civil Identity Card must be replaced with a new one. The patient may not have access to medical treatment in Kuwait if he/she does not produce a civil identity document.

3.3.3 Religion

Article two of the Constitution states that "The religion of the State is Islam, and the Islamic *Sharia* shall be a main source of legislation." Article 35 states that "Freedom of belief is absolute. The State protects the freedom of practicing religion in accordance with established customs, provided that it does not conflict with public policy or morals."

The Ministry of Awqaf and Islamic Affairs preserves the Islamic heritage of the people and assumes responsibility for maintaining the spiritual and religious aspects of life.

3.3.4 Mosques

Mosques are the focal point of various Islamic guidance and awareness centers. Today, there are more than 630 mosques in Kuwait, with the Grand Mosque being the most modern and most remarkable.

FIGURE 3.7 THE GRAND MOSQUE IN KUWAIT



3.4 KUWAIT AFTER THE OIL BOOM

Oil was first discovered in 1938, but operations were suspended during the Second World War. It was not until 1946 that Kuwait made its first commercial shipment. Massive oil tankers were in use from the mid-sixties, creating a need for the giant sea island terminal which stands 4.5 km offshore at Mina Abdulla. To it was laid the world's largest submarine pipeline with a diameter of 48 inches (122cm).

From 1946 Kuwait's economy and rapid development have been closely linked with the oil industry. It is now considered one of the richest states in the Middle East. A phenomenal transformation has taken place over the past 50 years. Only a short time ago Kuwait was a desert community, depending for its economic survival upon the local pearl fishing industry and the sea going *dhow*.

Following the discovery of oil, phenomenal developments have taken place in the fields of education, industries, agriculture, commerce, health care, and housing. In addition, oil attracted a vast influx of foreigners, mostly Arabs. Kuwait's population today is cosmopolitan but it remains largely Arab and Islamic in character. The various sections of the population are linked by a common Arabic background and Islamic culture. Although ancestral customs remain distinctive, there are social traits that vary.

3.5 MODERN KUWAIT

The Kuwaitis themselves remain distinctively traditional in retaining their patriotic identity with the past. Fostered by the example of the ruling family they maintain the Kuwaiti dress of *bisht* (cloak) over *dishdasha* (gown) with the

ghatra (headdress) held secure by the *ugal* (black cord). The majority of the remainder of the population wear western-style clothes. Arabic is the first language with English as the second language. Automobiles and wide multi-laned highways have replaced the narrow streets of the past. Modern technology has brought electricity and water in abundance where once there was scarcity. Air-conditioning, television and radio, computers, all the products of a scientific age may be found where not long ago donkeys, horses and camels provided the only means of transportation. The change has truly been phenomenal and reflects the wisdom of the ruling family and government in bestowing the benefits of oil riches on the entire population.

FIGURE 3.8 MODERN KUWAIT WITH HIGH WAYS



Kuwait remains a predominantly masculine society but the advance of women to educational and social equality has been and is rapidly being accomplished. There is still the contrast between old and new, between tradition and liberalism, in the scene set by the intermingling of the conservative women who wear clothes according to the Islamic code and those who have followed modern fashion trends on the western pattern.

Educationally, Kuwait's women have leapt forward. Today female students are in the majority at the University and, in comparison with the 140 females attending school in 1937, there were nearly 60,000 in government schools in 1973-1974. Women are also prominent in Kuwait's commercial life and in the government service. Up to the present only Kuwaiti males over the age of twenty-one have the right to vote; but several women's organizations, with male backing, are proposing women's right to vote and the expansion of opportunities for females. It is also interesting to note that the Rector of Kuwait University is a female, Dr. Faizah M. Al-Kharafi.

This is a reflection of the duality of Kuwait society. Traditionalism remains strong, mostly in the older generation, but there is a strong and growing liberal element, formed mostly by those who have come into contact with western ideas. Basically the groups represent the old desert tribal culture and the modern, urban population. There is, however, no conflict beyond the debating level and both sections are loyal to the Sabah rulers who are, as in the past, the unifying force.

The contrast between past and present is vividly presented by the traffic scene in Kuwait City which, as in other metropolitan areas of the world, has brought the rush-hour crawl, the inevitable traffic jams and the perennial problem of parking to a place where the automobile was not so long ago a rarity indeed. In addition, Kuwait has a high rate of motor car accidents and it is not unusual to

find the most challenging Orthopedic surgical conditions related to fractures and dislocations in hospitals around Kuwait.

3.6 FORMULATION OF KUWAIT'S STRATEGIES FOR HEALTH BY THE YEAR 2000

The formulation of health strategies in Kuwait is based upon the local circumstances of the country, the most important of which are as follows:

3.6.1 Population

An assessment of the current health status of the community is largely determined by the structural characteristics of the population: age, occupation, marital status, and ways of living. The rapid growth of the total population of Kuwait over the past 50 years has roughly matched the demands of economic growth. Estimates of the future population are important to the health plan and are based on considerations of the past changes, present structure and assumptions about future trends (Kuwait Health Plan, 1982: 1-5).

TABLE 3.1 POPULATION PROJECTION (IN THOUSANDS)

YEAR	KUWAIT	NON-KUWAITI	TOTAL
1980	562	793	1,355
2000	1,247	1,644	2,891

This prediction is certainly subject to a number of unknown variables in the future. In particular, the rate of growth of the economy and the speed with which Kuwaiti nationals equip themselves to participate actively in different spheres of economic, health and social activity that will influence the future size and composition of the population.

3.6.2 Population strategies

Although the current rate of population growth is high, it is not proposed to call for measures to regulate fertility, but rather to rationalize net immigration into Kuwait. A number of possible strategies are suggested: education planning to increase the Kuwaiti element of the industrial and service work-force; the promotion of automation; concentration of industry; reduction of unnecessary immigration of the dependents of expatriates.

Having discussed general information about Kuwait, its location, islands, rulers, and population it is important to reflect on the relation-axes model introduced by Wielemans and Chan (1992:19-38) to understand some implications for the influence of Islamic medicine on the training of health care professionals in Kuwait.

3.7 THE RELATION-AXES MODEL

Wielemans and Chan (1992:21) mention that the nature of the industrial mentality, the cultural identity and education to a large extent depend on the underlying image of man (of self). The way in which people see their relationship to the other (nature, social reality, self and the transcendental) affects the way they act towards it. Most Muslim societies, including Kuwait, are undergoing accelerated social change under the impact of decolonization, war, revolution, urbanization, industrialization, and education. This accelerated change is accompanied by various reaction and responses. The influence of modernization in the Arab world has been documented by many authors, such as Al-Thakeb (1985:575); Nassehi-Behnam (1985:557); Sow (1985:563) and Vergin (1985:571). The historical roots of traditional and modern western medicine are the same, but during the past century these systems diverged. Modern medicine became dominant, replacing traditional systems in much of the world and denigrating them as quackery (Fulder, 1986:235). In recent years there has been a resurgence of interest in traditional systems, with a remarkable change in attitude among health care professionals. There is an increasing awareness that health care providers must familiarize themselves with specific culture-bound syndromes and their manifestations in order to provide quality care to culturally diverse clients seeking health care services. Thus, there is a need for a complementary relationship between traditional healing concepts and practices with modern medicine in the third world, reflecting the importance of respect for cultural diversity in health planning (Campinha-Bacote, 1992:11 and Ullrich, 1984:200).

When reflecting on the relation-axes model, the author will first discuss the relation-axes in terms of man and himself in the following areas:

- industrialization and "industrial mentality"

- influence of technology on culture
- educational socialization and core curriculum
- Islamic medical model
- health status, health awareness and major health problems in Kuwait

before progressing to discuss man and his environment, man and fellowmen and man and the transcendental. As has been mentioned before, the relation-axes model is used as a paradigm for understanding man in his rather complicated web of relations even in the sphere of medicine and in the training of health care professionals.

3.7.1 MAN AND HIMSELF

3.7.1.1 Industrialization and “Industrial Mentality”

The impact of the “industrial mentality” or technological-industrial influence (see Chapter 2, point 2.2.1.) on the modernization process of an oil-rich Arab society, such as Kuwait, can have both negative and positive effects on the emergence of a health care system within the context of accelerating developments.

One of the major concerns of developing countries is to transform their traditional premodern health care and societies into sophisticated health care systems and social organizations that characterize the “advanced” and economically prosperous nations of the Western world. This process, identified by social scientists as modernization, is most commonly approached in terms of economic growth stimulated by recent technology (Berger *et al.* 1973:8-9, and Moore 1974:94). Berger *et al.* (1973:8-9) defines

modernization as “the institutional concomitants of technologically induced economic growth” and Mesthene (1971:25) defines technology as “the organization of [scientific] knowledge for the achievement of practical purposes.” According to Gallagher (1988b:59), “compared with premodern modes of health care, modern health care has a calculable, ‘commodity’ character ... health care conveys the symbolic meanings of modernity.” It is these broader meanings that reflect the effects of “industrial mentality” on the health care and social institutions of developing societies. These institutions are being transformed and reshaped by the “primary carriers” of modernization, such as technological production and bureaucracy, and its “secondary carriers,” such as education and urbanization. Although technology has transformed to a greater or lesser extent the living conditions in developing societies such as Kuwait, “it must be remembered that **technology does not operate in a cultural and social vacuum**” (Hammoud, 1986:53). The influence of technology on the culture and values of the indigenous society should be equally acknowledged.

3.7.1.2 Influence of technology on culture

“Technology assessment” is generally defined as the “systematic study of the effects on all sectors of that society that may occur when a (particular) technology is introduced, extended, or modified, with special emphasis on any impacts that are unintended, indirect, or delayed” (Lawless, 1977:5). This definition implies that technological assessment acknowledges both the positive and negative consequences of technology. **Technology indeed “creates new opportunities for people and societies, but it also generates new problems for them.** It has both positive and negative effects, and it usually has the two at the same time and in virtue of each other.” (Mesthene, 1971:26)

The **“industrial mentality”** as it is related to economy is as much a key variant in the Third World as it is in advanced industrial societies. It is apparent that there is a direct relationship between GNP and the level of well-being of a society. However, for developing countries, an increase in material wealth does not necessarily imply movement in the direction of viable socioeconomic development. There is considerable difficulty when economic policies are pursued without due consideration to their social impact upon the well-being of a particular society. **“The social and human dimensions must also be included in any assessment of the impact of a technologically induced economy on the socioeconomic development of Third World societies”** (Hammoud, 1986:54).

3.7.1.2.1 Health care system in Kuwait

The health care sector occupies a significant position among the social development sector, since it is responsible for preventing disease and protecting the people's health. It directly contributes towards improving the quality of life and increasing collective productivity. The State of Kuwait, therefore, secures various levels of preventive health care and treatment for all citizens and expatriates free of charge or at nominal cost.

The State is also keen on increasing health and hygiene consciousness among individuals in the society, as well as securing a sound healthy environment, maintaining it, and protecting it against pollution. To secure complete coverage by the health care services, Kuwait has adopted the health - zone system. Each zone includes a public hospital that receives cases that need special care, for example, in Farwaniya, there is a Farwaniya hospital. Affiliated specialized health centers are spread across the country according

to the population density of each district where they receive patients who are referred from the public health centers which render primary care only. There are also a number of other hospitals specialized in treating certain diseases, including the Cancer Unit, Sabah Maternity Hospital, Sabah Chest Hospital, Burns and Plastic Surgery, *Al Razi* (Orthopedic) Hospital, Organ Transplant Unit, Psychiatric Hospital, Ophthalmology Hospital and Rehabilitation centers and the like.

FIGURE 3.9 THE INTERIOR OF A HOSPITAL IN KUWAIT



According to the Ministry of Planning and Center for Research and Studies on Kuwait (Kuwait, 1995:100-101), in 1990 the government health institutes were as follows:

- 67 public health centers providing basic care services
- 53 dentistry clinics

- 14 diabetes clinics
- 48 maternity and pediatric centers
- 32 protective health centers
- 16 public and specialized hospitals
- 8 private schools

During this time the government and private hospitals included 6110 beds, that is, at the rate of three beds per 1000 population. The number of health care workers reached 4200 doctors, pharmacists and dentists; and about 14880 technicians in allied health services and nursing; at rates estimated for the first category as 2 per 1000 population, and for the second category at nearly 7 per 1000 population.

The programs of maternity and pediatric care receive great attention in the form of providing free pre-marital tests for protection against hereditary diseases, treating sterility and gynecological cases, providing pre- and post-natal care, and providing mothers with the required guidelines for health care including guidance about the importance of breast feeding and vaccination against contagious diseases.

Specialized centers in collaboration with the Preventive Medicine clinics and School Health inoculate infants up to the age of six free of charge according to the schedule shown on the birth certificate, and coordinate with parents to make sure that the child gets the required vaccinations on time. This has been reflected in the high percentage of various vaccinations administered. As of 1990, 99% of infants age one to two years received polio vaccinations. The average vaccination rate against measles and tuberculosis reached more than 96% and 95% respectively for children 4-6 years of age. This has assisted in the absence of polio cases and deaths due to measles since 1988 (Ministry of Planning, Kuwait, 1995:101).

FIGURE 3.10 THE AL RAZI HOSPITAL FOR ORTHOPEDIC CONDITIONS



FIGURE 3.11 THE CANCER UNIT IN KUWAIT



FIGURE 3.12 SAUD A. AL-BABTAIN CENTER FOR BURNS AND PLASTIC SURGERY



FIGURE 3.13 NEONATAL CARE IN KUWAIT



As for the area of preventive health and environment protection, the State supports programs of health education, guidance, and population vaccination against contagious diseases according to a continuous epidemic surveillance endeavor in cooperation with the World Health Organization.

The Ports and Borders Health Department makes sure that those arriving in the country are free of contagious diseases, foremost of which are cases of AIDS. All members of the expatriate labor force and their families arriving for the first time are subjected to tests that include blood tests for those over 11 years of age, in addition to administering BCG vaccinations to children below that age. The same tests are administered to blood donors.

Following the 1973 oil boom, the Arabian Gulf area has emerged as one of the richest regions in the world. However, the states in the Gulf region are still considered a part of the developing world because of their degree of dependence upon foreign technology and on expatriate workforce. The governments of these countries spend large proportions of their revenues on welfare, education, and training of their populations, with the expectation that at some time in the near future each country will be able to rely more fully on its own technological resources and health care professionals. "Medical care and training of health care professionals are regarded as the 'sacrament of modernity' in developing societies. They are linked to hopes of deliverance from disease, disability and early death" (Berger *et al.* 1973:139).

In the process of "modernization" Kuwait has already managed to provide a well structured and comprehensive health care system. To deliver such care, the country depends on expatriate health care professionals. To focus on future requirements of Kuwait Health Services, much will depend on the Kuwaiti health care professionals. However, the essential goal of educating and

training Kuwaiti health care professionals to deliver this care has often been delayed and is somewhat less than comprehensive (Bana *et al.*, 1990:483).

3.7.1.3 Educational Socialization and Core Curriculum

3.7.1.3.1 Education in Kuwait

Since the discovery of oil in 1938, Kuwait has been ahead of other countries in the Arabian Gulf region, which has resulted in the rapid social, economic and educational development of the state. With the advent of the marketing of oil, which is Kuwait's main resource, special emphasis has been given to the social and cultural services of the country at large, including education and health services.

Education affects health in that it is a source of qualified management for health services and a source of awareness of the importance of health in the individual and community. The government of Kuwait has contributed a substantial amount to education over the years; for example, in 1979 and 1990, 180 million KD (46% of the public expenditure at that time) was spent on public and university education. Higher education and adult education programs have been important factors in raising the educational level of the population. High enrollment rates, the result of the accelerated growth of the school-age population, have created a continuing demand, which is being met. The comprehensive educational policy will continue in the following years and includes strategies for the following: free education for every citizen; the eradication of illiteracy; the diversification of specialized and higher education; and further qualitative improvements at all levels.

School attendance in Kuwait is compulsory for all children between the ages of six and fourteen, that is, in the primary and intermediate stages. All stages of state education are free. It is interesting to note that in numerous institutes students are granted generous monthly stipends to encourage them to continue their education. The schooling system consists of three stages: elementary, intermediate, and secondary. Each stage consists of four class years; the student, therefore, needs twelve years to complete his general school education.

Presently the number of registered students in all Kuwaiti schools and institutions has reached about half a million male and female students; that is, approximately 30% of the total population of Kuwait is learning and studying. The starting age at primary school is six, but the Ministry of Education provides a free pre-school service, through its kindergartens, for Kuwaiti children between the ages of four and six.

The system of education and teaching in Kuwait is designed to encourage an adaptation to the modern system of technological advancement. The Kuwaiti Ministry of Education and Ministry of Health monitors the achievements of other countries, their experiences, and modern educational theories. Kuwait appears to adopt what is appropriate for the Kuwaiti environment and what is suitable in the field of education and health in the various spheres. One such example, is the field of health, where a Canadian delegation of health care professionals have been invited for a period of three and a half years to upgrade the standard of physical therapy in the hospitals. The qualification of the undergraduate physical therapy at Kuwait University is of international standards as all final examinations are conducted by external examiners from the United States. However, problems do arise when graduates are working in hospital environments that do not demand standards taught in the university.

There are three governmental bodies who are responsible for educational services in Kuwait, namely:

1. The Ministry of Education, which is responsible for the supervision of the private and public sectors of education until the end of the secondary stage, and the supervision of scholarships granted to non-government officials.
2. The Public Authority for Applied Education and Training, which is responsible for vocational education in the applied education institutes and training centers.
3. Kuwait University is responsible for tertiary education in the country. A decree was recently issued, appointing a Minister of Higher Education whose jurisdiction covers Kuwait University, The Public Authority for Applied Education and Training, as well as scholarships abroad.

3.7.1.3.2 Kuwait University

(a) The Purpose of the University

According to Kuwait University (General Undergraduate catalogue, 1993-1995:31), the purpose of the University is basically for its students to benefit from the fruits of knowledge, cultural and civilisational heritage and intellectual creation; to develop human resources, raise their productive ability and their cultural and social level; and to contribute to society's development which is as follows:

1. To preserve, advance and disseminate knowledge on both the national and individual level.
2. To disseminate knowledge, prepare personnel specialized in the different branches of knowledge, and preserve the cultural heritage through education and training.
3. To boost young people's intellectual, spiritual, moral and physical attributes.
4. To contribute to the economic, social and cultural advancement of society.
5. To foster its cultural and scientific ties with other regional, Arab, Islamic and international institutions which share similar goals.

(b) Objectives of the University

The general objectives of the university include the following:

1. To provide leaders in all spheres and prepare young people who are conscious of their society's customs and values, able to understand its problems, and capable of bringing about necessary change.
2. To monitor scientific progress and help to advance it through research so as to solve society's problems and achieve economic, social and cultural development.
3. To pay particular attention to studying Arab and Islamic civilization, the Arabian Peninsula and the Arab region in the Gulf.

3.7.1.3.3 Health Science Center

The educational system at Kuwait University also provides for the training of health care professionals in the country. There is an established Health Science Center which includes the (a) Faculty of Medicine and the (b) Faculty of Allied Health Sciences and Nursing. The latter includes the departments of Physical Therapy, Medical Laboratory Sciences, Radiological Sciences, Health Information Administration, Nursing and English language unit.

Planning is now underway for the development of a semi-autonomous center consisting of several Faculties, each headed by a Dean. The center include the present Faculties and the Faculties of Pharmacy, Dentistry and Family Medicine which are currently in the planning stages.

The Health Science Center was established with a view to expand medical education in Kuwait and to create a community of health care professionals with high international standards.

(a) Faculty of Medicine

(I) History of the Faculty of Medicine

The Faculty of Medicine in Kuwait was founded in 1973, by the appointment of a Dean Elect, following several investigations and feasibility studies which were carried out over a period of eight years (Vagg and Khatib 1976:3). A committee of medical consultants was established in 1966 with the cooperation of the World Health Organization, and in that year it was recommended that the time was not ripe to start a medical school in Kuwait.

However, Kuwait developed so rapidly that by 1973, many of the previous significant objections had been overcome. In particular, the University had established a Science Faculty; many new hospitals had been built and developed to create an environment conducive to medical teaching. At that time there were already several Kuwaiti consultants of good standing supported by a small but growing number of Kuwaiti doctors. The first intake of students took place in 1976 (Vagg and Khatib 1976: 3).

FIGURE 3.14 THE FACULTY OF MEDICINE



An important problem encountered by the Faculty of Medicine in 1973 was to recruit competent qualified medical staff and skilled technicians for the laboratories. Such skilled personnel were not available in Kuwait at that time in sufficient numbers for the establishment of the Faculty.

A further obstacle arose subsequently, when the Ministry of Health expressed regret that it was not prepared to make the Al-Sabah hospital available for teaching students from the Faculty of Medicine. This obstacle was then overcome with the decision to build a new teaching hospital called Mubarak Hospital on the new University campus as part of the Faculty of Medicine. This strategy created significant long term benefits for the Faculty; but during the short term, it created a great deal of additional work for staff members who were in need of help to start a complex new facility.

The Faculty of Medicine has adopted a coeducational teaching policy, where admission is based on the high-school grade point average. The teaching program follows the semester system, covering 7 years of study: 2 years at the premedical stage, 2 years at the preclinical stage, and 3 years at the clinical stage. On completion of the preclinical program a B.Med.Sc. degree is awarded and candidates are eligible to continue on for the M.B.Ch.B. (Ahmed. *et al*, 1988:506).

(II) Objectives of the Faculty of Medicine

According to Vagg and Khatib (1976 :3), the Faculty of Medicine in Kuwait has three prime objectives:

- To produce well qualified doctors through a program of undergraduate teaching followed by a continual program of postgraduate training

throughout the working lives of the alumni, so that they may keep abreast of the latest advances in medicine and develop their own capabilities to the full. In this way, it is intended to produce professional doctors who will be able to fulfill Kuwait's requirements in primary care, public health, social medicine and administration, including specialist services in its hospitals.

- To provide a high standard of patient care to the public, over a wide range of general and specialized services, in the Faculty's own teaching hospital.
- To encourage and support both fundamental and applied research to benefit both the Faculty's own staff and students, including the community as a whole.

Presently there are many hospitals, clinics, specialized hospitals, rehabilitation centers, private hospitals, and social services which have been established and are still being developed for the health care services in Kuwait.

(b) Faculty of Allied Health Sciences and Nursing

The Faculty of Allied Health Sciences and Nursing is relatively a new Faculty, having acquired the status of a separate Faculty on 22nd June 1982. Prior to having been granted this status, the School of Allied Health and Nursing was part of the Faculty of Medicine.

In 1976, the Faculty of Medicine admitted the first undergraduate medical students. This Faculty was given the additional responsibility of training Allied Health Staff by the Ministry of Public Health's Governing Board for Nursing and Para-Medical Education. The Ministry of Public Health had recognized Kuwait's deficiency in physicians and Allied Health personnel. In view of this,

the Ministry adopted a policy of training staff locally wherever possible, because they would have a better understanding of local circumstances; they could be trained to meet local needs and they would provide a more stable population of health providers than the expatriate staff.

FIGURE 3.15 THE FACULTY OF ALLIED HEALTH SCIENCES AND NURSING



The Governing Board for Para-Medical and Nursing Education identified the fields in which the need for training health professionals was crucial. The fields include: Physical Therapy, Medical Laboratory Sciences, Health Information Administration, Radiological Sciences, and Nursing. The

undergraduate programs in the first four of these fields were approved by the University Council in June 1978, and the first undergraduate students were registered in September 1978. However, the Nursing program was approved by the University Council in April 1980, and the first undergraduate students matriculated in September 1982.

The Faculty of Allied Health Sciences and Nursing was initially located on the former premises of the Nursing Institute which was the grounds of Sabah Hospital. It is now located on the University campus at Shuweikh, which was originally the premises of the Faculty of Medicine. Initially the Faculty admitted a maximum of 125 students annually; but with the increasing number of students and staff over the years, the number has increased. The Faculty of Allied Health Sciences and Nursing has begun implementing plans for the construction of new premises at the Mubarak Hospital site in Jabriya, where the Faculty of Medicine is already situated.

3.7.1.3.4 Scientific Research

His Highness the Amir of the State of Kuwait spoke forcibly about the important role of youth in his nationwide speech delivered in 1978, two months after his accession where he stated that: "The process of building the modern state must go hand in hand with the enhancement of our human resources." In a span of twenty years the Amir's call for attention to the needs of the younger generation has reaped a rich harvest in the wider utilization of the benefits of education provided by the State. Today, the majority of top official positions are held by highly educated Kuwaitis.

The promotion of science and the encouragement of scientific research and modern technology have been the cornerstones of the growth of modern Kuwait. Kuwait quickly came to appreciate the importance of computer technology, which is now widely applied in government and in the private sector. To keep pace with advances in the computer sciences and to ensure full benefits to the country, computer studies are now included in the curricula of Kuwaiti schools. Computer studies will be a standard part of general secondary education in the next few years. In addition, major computer exhibits have been held to keep pace with the advancement in computer technology from different countries.

The Kuwait Science Club aims at developing an interest in scientific hobbies by providing experience to the young in using the machinery and equipment in the club's workshops and laboratories. It also gives them the opportunity to try out their own inventions.

(a) Kuwait Institute for Scientific Research

The Kuwait Institute for Scientific Research plays a fundamental role in shaping Kuwait's future development, using advanced scientific methods to develop research programs designed to address the country's needs in a number of fields.

The Kuwait Institute was established in 1967, focusing its activities in the initial years to field surveys in cultivating arid areas, marine species, and petrochemicals. KISR occupies the 5th place among 50 scientific research institutions in Third World countries.

The Institute has achieved significant results in the practical application of research findings during the past few years, as can be seen from some of the current projects. One of the Institute's principal research fields is the maximization of food resources, and under this heading KISR has had notable success in the cultivation of fish such as "subaite" and "boliti" on a commercial basis.

FIGURE 3.16 KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH



The Institute has designed a long-term program, in cooperation with Germany, for the development of reverse osmosis (RO). Preliminary results of the RO experiment indicate that it may constitute a promising alternative to multi-stage desalination of sea water.

To help protect Kuwait's natural and man-made environment, KISR has developed an interactive mode numerical model for predicting short-term and long-term movement and spread of oil slicks in the coastal waters of Kuwait.

Among the Institute's many successful experiments in the application of solar energy is the development of photovoltaic (PV) panels, which are now installed in 23 fire trucks and 2 fire boats to keep their batteries charged. These panels are also used to charge 15 batteries stored at Kuwait General Fire Department.

(b) Kuwait Foundation for the Advancement of Science

The Kuwait Foundation for the Advancement of Sciences is considered to be one of the leading public organizations in Kuwait. It was established in 1976 through the initiation of H.H. the Amir, when he was Crown Prince, for the promotion and support of scientific research throughout the world and to help scientists pursue their research and activities for the benefit of humanity at large.

The KFAS is keen to strengthen ties of cooperation with international institutions such as:

- The International Center for Theoretical Physics (Trieste, Italy)
- Third World Science Academy (Italy)

- International Council for Scientific Teaching

KFAS takes part in international academic and scientific conferences, symposia and seminars.

3.7.1.3.5 Health Services in Kuwait

The history of modern type of health care in Kuwait dates back to the year 1912, when the first medical clinic was opened. Since then government officials have paid increasing attention to the improvement and development of therapeutical services. Since independence in 1961 they have devised a comprehensive plan to make Kuwait a "Welfare State" in which all citizens and residents enjoy completely free health care. Should a citizen require specialized medical care which is not available in Kuwait, the Ministry of Health undertakes the financial responsibility for any necessary treatment abroad.

Presently the health service system is undergoing a stage of assessment and review, especially following the period of rapid expansion because of the influence of advanced technology and knowledge.

Among the basic objectives that the Ministry of Health seeks to realize are the improvement of medical efficiency, the recruitment of more Kuwaiti specialists, and the reduction of dependence on foreign manpower. In order to achieve those objectives, a Faculty of Medicine was established in 1973, and a Faculty of Allied Health Sciences and Nursing was established in 1982. Today both these faculties are referred to as the Faculty of Health Sciences, which is noted for providing the Ministry of Health with specialized professionals.

3.7.1.3.6 Additional Health services in Kuwait

(a) Nuclear Medicine

The discovery of the atom and its utilization for peaceful objectives has had its utmost impact on the advancement of medicine in the fields of diagnosis and treatment. Nuclear medicine is one of the most modern specialties.

The Nuclear Medicine section at the Faculty of Medicine (Kuwait University), in coordinating with other nuclear medicine sections in Kuwait hospitals, the World Health Organization (WHO) at Geneva, and the International Atomic Energy Agency (IAEA) at Vienna, conduct seminars aimed at increasing expertise and improving efficiency.

(b) Blood Bank

The Kuwait blood bank was established in 1965. It has functioned primarily to ensure that plasma be safe for use. However, its functions have expanded over the years.

FIGURE 3.17 THE CENTRAL BLOOD BANK



3.7.1.3.7 The Center for Islamic Medicine

The construction of the Center for Islamic Medicine constitutes an additional asset to the edifice of health services offered by the State of Kuwait. The year 1987 witnessed the establishment of physical therapy, acupuncture, and nuclear medicine centers, in addition to the Center for Islamic Medicine for treatment by medicinal herb's. The Center, inaugurated on 21st February, 1987, took four years to construct at a cost of KD 6.5 million and occupies a total area of nearly 15,500 square meters, including a Mosque.

The Ministry of Public Health pays full attention to the Center, which originally came as a gift from the family of Yusuf Al-Marzouk and his wife Lulwa Al-Nassar as an expression of love and loyalty to Kuwait.

FIGURE 3.18 THE MOSQUE ATTACHED TO THE CENTER FOR ISLAMIC MEDICINE



The building features finest Islamic architecture and art, both inside and outside. It consists of two sections. The right section is occupied by the Center for Islamic Medicine and the Islamic Organization for Medical Sciences which includes the very many consultation rooms for patient management. On the left stands, Lulwa Al-Nassar's mosque, on an area of 1,267 square

meters, with a capacity for 1,500 worshippers. The upper floor is reserved for female worshippers.

Both the **Center for Islamic Medicine** and the **Islamic Organization for Medical Sciences** operate within the framework of **common objectives** for the **revival of the Islamic medical heritage**, fulfilled practically in the Center through the treatment of patients by medicinal herbs, whereas the Organization seeks to revive this heritage through intellectual and informational means.

From these observations it is clear that changes are taking place both in the modern and traditional aspects of Kuwaiti Health Care System. However, it is important to reflect on what are the sociocultural influences of these changes.

Having discussed the relation-axes model in terms of industrialization and “industrial mentality,” influence of technology on culture, health care systems in Kuwait and educational socialization in Kuwait, it is important to reflect on the relation-axes model in terms of man and himself, man and fellowman, man and nature and man and the transcendental.

3.7.2 MAN AND HIMSELF - ISLAMIC MEDICAL MODEL

The author would like to alert the reader that this aspect of the relation-axis, namely, Man and Himself, will be discussed from the Qur'an and the *Sunnah* of the Prophet Muhammad (P.B.U.H.). The author is a Muslim and firmly believes that the Qur'an is the word of God; and that all Prophets from Adam, to Abraham, to Moses, to Jesus, to Muhammad, may Allah's Peace Be Upon Them All, are true prophets of God.

In the Qur'an, Man occupies a lofty position in the scale of beings in the entire universe - "Whatever is in the heavens and in the earth" - is made subject to man and exploited by him for his good ends (XXXI, 20; XIV, 32-33; XVI, 14; XXII, 65; and II, 29.); only, **man is created to do service to God and to worship Him alone.** His intellectual powers are high, indeed, unique in all creation. In a competition of knowledge with angels, Adam won a decisive victory over them since he was able to "name things," while they were not. God made him His vicegerent (*khalifa*) on the earth (II, 29ff.) because of these abilities. Unfortunately, however, man's moral powers have not to date proven commensurate with his cognitive gifts, for he has "not yet fulfilled the (primordial) Divine Command" (LXXX, 23) and not discharged the "trust" which he had voluntarily undertaken in pre-eternity after it had been refused by the entirety of the rest of the creation, for all were frightened of the responsibility it involved (XXXIII, 72). Hence the need for man to be **constantly morally alert, to ever search his conscience and not to be misled by its often beguiling placidity and self-deception** (Rahman, 1982:76).

The Qur'an praises man's very figure: "He (God) formed you and formed you beautifully" (XL, 64; LXIV, 3). It is interesting to reflect on the fact that God created man "in the best of molds," yet man degrades himself to the lowest of the low. Peace and prosperity are among the most precious blessings of the Lord (Sura CVI), yet man seems incapable of managing them well, abuses them and particularly abuses the power generated by them. This theme is persistent through the Qur'an and is the main reason given by the Qur'an to explain the fall and extinction of societies. This state of affairs, in the eyes of the Qur'an, is rooted in the **lack of magnanimity and narrow vision of man which renders him selfish.** "Man is by nature unstable: When evil touches him, he panics, but when good things come his way he prevents them from reaching others" (LXX, 19-21). "If you were to be put

in possession of the (inexhaustible) treasures of the mercy of the Lord, even then you will sit on them for fear of spending” (XVII, 100). The **remedy that the Qur’an proposes is gratitude to God, which alone will break this selfishness and narrowness of the mind, for only through God can man transcend his limitations.**

Islam’s attitude to health and, indeed, medicine, like any other religious teachings, emphasizes cleanliness of body and mind (the term *tahara* and its derivatives frequently used in the Qur’an equally comprehend both). Performing ablutions (and bathing regularly) as a prerequisite even for ritual prayers, emphasis on wearing clean clothes, regularly cleaning the teeth every day, combing the hair and using scent are all embedded in the very fundamental ritual teachings. Indeed, the Qur’an proclaims, “Children of Adam! Beautify yourselves whenever you visit the mosques” (VII, 31). Men are constantly asked to eat and drink of all good things God has created but not to go to excesses, to exercise moderation and not to corrupt the earth. Like the term *tahara* (cleanliness), the term *shifa* is employed by the Qur’an to mean both physical and spiritual cure. Thus, *shifa* is ascribed both to the Qur’an (e.g. XVII, 82) and to good food like honey (XVI, 69).

In the *Hadith*, or the record of the Prophet’s putative sayings and deeds, compiled mostly during the 9th century, there is a good deal said in praise of health as a unique blessing from God and also on specific matters of health and illness (Rahmān, 1982:77).

It is interesting to note that the fields of chemistry, mathematics, and astronomy were special favorites among Muslims, while at the more popular level alchemy and astrology were also pursued; but it was **medicine that genuinely touched the center of religious motivation in Islam** (Rahman, 1982:79). Here was a body of knowledge that was scientific, useful to man and, indeed, was human

par excellence. Abu 'Abd Allah Muhammad ibn Ahmad al-Dhahabi (d. 1348) writes in the brief introduction to his work, *The Prophetic Medicine (al-Tibb al-Nabawi)*, (Cairo, 1961, as quoted by Rahman, 1982:79):

“It is obligatory upon every Muslim to seek nearness to God with whatever means possible by way of service to Him and that he try his utmost to carry out God’s commands and ordinances. Now after carrying out specific religious rites and desisting from actions He has prohibited, the most beneficial means and the most helpful service rendered to God is that which benefits man in preserving his health and in curing his illness, since health is something Muslims are asked to pray for even in their ritual prayers.”

The above named author is among the prominent fourteenth century religious scholars of Islam, noted especially for his historical work. Since, it was medicine that genuinely touched the center of religious motivation in Islam, it is therefore important to study the importance of the Islamic heritage from a medical point of view.

3.7.2.1 Motivation for the importance of studying Islamic heritage

When man claims to be masters of modern science, the Holy Quran warns us that “Knowledge is only a little that is communicated to you (O Men!)” (Quran, S.17:V.85). This is a blunt warning to man. No matter how much he may think he has achieved, he is only a beginner. Such a notion about our civilization makes us particularly aware of **man’s mortal nature**. There are many civilizations that have come before us and that will come after us. **Wisdom lies in knowing how to learn from our past experiences. With it comes the ability to**

render justice to those pioneers who have preceded us and have made this world what it is. According to the Quran: "Mankind was one single nation, and Allah sent Messengers with glad tidings and warnings; and with them He sent The Book in truth, to judge between people in matters wherein they differed" (S.2:V.213) and "Man was created from a single pair" (S.4:V.1; S.39:V.6; and S.49:V.13), this has clear implications that every nation has contributed to medicine in its present form.

The unrecognized contribution of Islamic medicine to modern medicine is slowly beginning to unfold. It is difficult to evaluate the contributions that one culture has made to another or to the world in general, and this is particularly true when the cultures have been in collision for considerably more than a millennium, as has been the case with Islam and Christianity. "Most of those in the Christian West learn little of the cultures of Islamic countries, and, indeed, much of what they are taught is wrong either because it is misinformed or worse, because it is based on downright falsehood" (Wright, 1996:15). "The truth is that Islam was flourishing when Christendom was asleep, caught fast in the lethargic intellectual mire that endured over the period known as the 'dark ages'" (Wright, 1996:15). It was during the first half of the seventh century until the latter decades of the thirteenth century, the amazing phenomenon which can best be described as the Empire of Islam was born, developed and then flourished at a time when Europe was fragmented and in decline.

Early on in its history, the Empire of Islam did indeed split into two caliphates, the Eastern and the Western. The Eastern Caliphate concentrated on Egypt and everything lying east of it, and the Western Caliphate which was centered on Andalus (most of present day Spain and Portugal and part of the south of France) included everything to the west of Egypt as far as the Atlantic Ocean. With the rise of the Fatimids, this simple division became complicated by Egypt and parts of the Arabian Peninsula falling into an intermediary region (Wright, 1966:16)

In the days of its ascendancy, the Islamic Empire stretched from Portugal, Spain and Morocco on the shores of the Atlantic in the west as far east as the Indian subcontinent, and further towards the northwest in the region of the Aral Sea in what is now Turkmenistan, Uzbekistan and Kazakhstan. Vast as it was, this territory was united by the cohesiveness of a single faith, Islam. It is important to understand that the **Islamic empire, deals with the empire of the intellect rather than one of the sword** (Wright, 1996:18). After the Arabs had expanded out of the Arabian peninsula and organized the lands they occupied, they took up a new challenge, that of expanding their intellectual horizons. **The contribution of Islamic Medicine to the development of European medicine was made possible by men of genius** such as Al-Razi, Ibn Sina, Ibn Ridwan, Ibn An-Nafis, Hunayn Ibn Ishaq, Thabit Ibn Qurra, Ibn Jezla, Ibn Zuhr, Ibn Rushd, Al-Majusi, Az-Zahrawi, Ibn Maimun, Al-Kindi, Al-Biruni, Ibn Al-Haitham and others. The work of these scholars is discussed in the book, *The legacy of Arabic medicine during the golden age of Islam* (Wright, 1996).

Individuals within the Empire of Islam made significant contributions to the advancement of medicine. Amongst these were Hunayn Ibn Ishaq's adaptation of the Arabic language to medicine and science in general and his masterly translations of earlier Greek works, Az-Zahrawi's rescue of the practice of surgery from the general indifference of most intellectuals and his technical expertise in the design and construction of surgical instruments (as well as his description of hemophilia), Al-Razi's original description of measles and smallpox and his enormous written work called "The Continent" in which his medical knowledge and that of his predecessors is minutely documented, and Al-Razi's and Ibn Al-Haitham's development of the method of inductive reasoning, the basis of modern science (Wright, 1966:21-22). Some of these scholars will be discussed when reflecting on Islamic heritage.

3.7.2.2 The importance of studying Islamic heritage

Islamic Medicine drew heavily on the knowledge of the ancient Greeks (Hippocrates, Aristotle, Galen etc.) through manuscripts left behind by them which were made accessible by their being translated into Arabic, either directly or from first translation into Syriac. Indeed, this age of translation made available manuscripts from other regions such as India, Persia and to a lesser extent China. The writings on Arabic Medicine were overwhelmingly set down in Arabic. Even those who were not Arabs (such as the Jew, Ibn Maimun, or Maimonides) made use of it (Wright, 1996:19).

It is perhaps not appreciated that Islamic medical men had recourse to various agents for the treatment of pain. **Ibn Sina and others have described the use of drugs and aromatic substances to produce analgesia and even anesthesia.** Their surgeons possessed a considerable number of instruments designed and produced by themselves. Az-Zahrawi himself described more than two hundred. A fine collection of replicas of some of these were formerly exhibited in the Kuwait Islamic Medicine Center, but were, alas, lost during the invasion of 1990 (Wright, 1996:20).

When reflecting at the Islamic heritage, it is necessary to give a historical perspective of medical education in the Islamic lands in order to understand the rise and decline of Islamic medical education.

3.7.2.2.1 Medical education in Islamic lands from the seventh to the fourteenth century

According to Leiser (1983: 48), the region between the Nile and Oxus rivers is the area where medical knowledge, education, and practice had no religious boundaries. Medicine pertaining strictly to the Islamic faith meant the body of material known as "*tibb al-nabi*," or "medicine of the Prophet." The *tibb al-nabi* eventually became a compilation of all the alleged sayings (*hadith*) of Muhammad related to medicine. It is interesting to note that the **Qur'an does not speak about medicine, although it sets a high value on health and the restoration of health. It stresses good food, like milk and honey (S 16:V 66-69), as blessings of God for man; it speaks not only of grains and fruits created for man by God but reiterates in several places that the "heavens and the earth and whatever is therein has been made subservient to man" to discover for his good ends (S.22:V.65, S.31:V.20, S.45:V.13) and he has been created to serve God's purposes. It stresses cleanliness in both physical and spiritual terms and lays down rules of ablution and bathing (S.8:V.11; S.5:V.41).**

3.7.2.2.2 History of Medicine - Ancient times

It is interesting to note that according to the Qur'an (S.3:V.33-34; S.4:V.163-165; S.5:V.19; S.6:V.84-90; S.23:V.23-50; S.57:V.26-27) there was a continuous line of Prophets for every nation. So it is **important to understand what this information is imparted to the world's nations that may have contributed to health care in its present form.**

According to The World Book Encyclopedia (1995:372-373) regarding the Middle East, by about 3000 BC, the **Egyptians**, who had developed one of the

world's first great civilizations, began making important medical progress. The world's first physician known by name was the Egyptian Imhotep, who lived about 2650 BC. The Egyptians later worshipped him as the god of healing. About 2500 BC, Egyptian surgeons produced a textbook that told how to treat dislocated or fractured bones and external abscesses, tumors, and wounds.

Other ancient Middle Eastern civilizations also contributed to medical progress. The **ancient Israelites, for example, 1200 to 600 BC, required strict isolation of persons with gonorrhea, leprosy, and other contagious diseases.** They also prohibited the contamination of public wells and the eating of pork and other foods that might carry disease (The World Book Encyclopedia, 1995:373).

The **ancient Chinese** developed medical practices that have been handed down almost unchanged to the present day. This **traditional medicine** is based on the belief that two **life forces, *yin* and *yang*,** flow through the human body. Disease results when the two forces become out of balance. To restore the balance, the Chinese developed the practice of *acupuncture* - inserting needles into parts of the body thought to control the flow of *yin* and *yang*. Chinese doctors still practice acupuncture. This technique is gaining momentum in becoming popular in Western countries like France, where it is sometimes used to treat certain pain disorders, as in the case of a Frozen Shoulder .

In **ancient India, the practice of medicine** became known as *ayurveda*. The etymology of the word ayurveda describes its meaning which is derived from two words, *ayus* and *veda*. *Ayus* stands for the combination of the body, the sense organs, the mind, and soul. *Veda* means science or knowledge. The purpose of Ayurveda is to promote health and longevity so that the **wisdom associated with age can be shared.** The intent of this enhanced vitality is the achievement of all of life's values, both secular and religious. Ayurveda was at the root of the ancient Greeks' medicine which in turn supplied the root of

Western medicine (Sheikh *et al*, 1989. as quoted by Larson-Presswalla, 1994:22). Ayurveda stressed the prevention as well as the treatment of illness. By 600 to 500 BC, practitioners of ayurveda had developed impressive knowledge of drugs to treat illness and of surgery. Indian surgeons successfully performed many kinds of operations, including amputations and plastic surgery. The author had an opportunity to talk to one of the Indian medical consultants in Kuwait and he said that not all the knowledge of herb's was transferred from one generation to another because of the fear of certain practitioners losing their income.

The civilization of ancient Greece was at its peak during the fourth century BC. Throughout this period, sick people flocked to temples dedicated to the Greek god of healing, Asclepius, seeking magical cures. But at the same time, the great Greek physician Hippocrates began showing that disease has only natural causes. He thus became the first physician known to consider medicine a science and art separate from the practice of religion (The World Book Encyclopedia, 1995:373). The Hippocratic oath, an expression of early medical ethics reflects Hippocrates's high ideals. But the oath was probably composed from a number of sources rather than by Hippocrates himself.

After 300 BC, the city of Rome gradually conquered much of the civilized world, including Egypt and Greece. The Romans got most of their medical knowledge from Egypt and Greece. Their own medical achievements were largely in public health. The Romans built aqueducts that carried 300 million gallons (1.1 billion liters) of water to Rome each day. They also built an excellent sewerage system in Rome (The World Book Encyclopedia, 1995:373).

The Greek physician Galen, who practiced medicine in Rome during the first century AD, made the most important contributions to medicine in Roman times. Galen performed experiments on animals and used his findings to develop the

first medical theories based on scientific experiments. For this reason, he is considered the **founder of *experimental medicine***. But because his knowledge of anatomy was based largely on animal experiments, Galen developed many false notions about how the human body works. Galen wrote numerous books describing his medical theories. These theories, many of which were wrong, guided doctors for hundreds of years (The World Book Encyclopedia, 1995:373-374).

3.7.2.2.3 Tensions within religious doctrines on medicine

In the areas of Religion and Medical Tradition, certain prominent religious authorities like **Al-Ghazali had protested against what they perceived to be excessive claims on behalf of medicine by some medical men**. At that time medicine was given the highest priority after ritual worship and a very conservative religious authority like Ibn Taimiya defended the learning of medicine from non-Muslim authors and teachers as perfectly legitimate. Indeed, Ibn Taimiya argues that just as it is lawful to seek guidance on the way from non-Muslims, so it is lawful to learn medicine and other sciences from the works of non-Muslims, the latter being even more legitimate since Galen and other Greeks did not write medical and scientific works in order to deceive or misguide anyone (Ibn Taimiya, 1981, as quoted by Rahman, 1984:590).

Questions were raised with reference to the effects of certain religious doctrines on certain medical issues. First, a general consideration about medication: Can things forbidden by law be used as medication or as part of medication? The Qur'an forbids the eating of pork and denounces the drinking of alcohol (Qur'an: S.2:V.173 and S.5:V.90). But in all passages where pork is forbidden, the Qur'an makes an explicit exception for "cases where it may be necessary." A large number of jurists authorized the use of some parts of a pig

and alcohol as medicines, "where this may be necessary." The Hanafi school of law in particular was the most liberal on the use of alcohol (Rahman, 1984:590-591 as quoted from the Shorter Encyclopedia of Islam). In the author's opinion, if death from starvation is certain, and there is no food available except for pork, then God is most forgiving and merciful; and the usual quantity of alcohol used in medicine is not sufficient to intoxicate the individual, provided it is used according to the correct dose. Scientific knowledge also confirms that pigs are carriers of *Tinea Soleum* (tapeworm), especially in very hot climates. So if such meat is ingested by a human body, it is possible that tapeworm might be transmitted to the patient. Besides, there may be many other reasons as to why pork is forbidden, not only in Islam but also in other religious teachings, such as Judaism. Thus, it is important to use sound reason and logic when discussing religious doctrines on medicine.

In the Qur'an what is unlawful cannot be made lawful on the basis of conjecture, but only on the basis of certainty (Ullmann, 1970, as quoted by Rahman, 1984:591). It was on this basis, that the dissection of human bodies was discouraged, if not outright forbidden, by some leading medical professionals. Here we come face to face with two contradictory principles in Islamic law. In pre-Islamic times, Arabs sometimes mutilated the bodies of their enemies who fell in battles "in order to make an example out of them." In the third year of the Islamic Era (625 CE), such mutilation was perpetrated on Hamza, an uncle of the Prophet Muhammad who had fallen in the battle of *Uhad*. During this time the assimilation of medical dissection to mutilation was facilitated by an "uncertainty" regarding the benefit of dissection: The question was, "Is this really worth it?" despite another general legal principle that says, "The needs of the living have priority over those of the dead" (Ibn Abidin, 1966, as quoted by Rahman, 1984:591). This principle was reinforced in 1967 at the Islamic Research Institute of Pakistan, which was directed by Fazlur Rahman, where he responded affirmatively to a question whether it

was permissible in Islam to transplant the eyes of a dead person into a living person (Rahman, 1984:591).

By some injunctions, such as forbidding dissection and the use of alcoholic beverages in drugs, some Islamic scholars impeded Islam in the knowledge of anatomy and the development of certain drugs, but Islam also created a civilization that advanced medicine to the greatest height it had yet reached. This civilization included large numbers of non-Muslims who were involved in medicine as intimately as the Muslims. Both Muslims and non-Muslims were the common heirs of the medical legacy of the ancient Greeks. During the early years of the Islamic era, medicine was dominated by non-Muslims. In his study of the history of medical education, Max Meyerhof (Leiser, 1983: 49) found that for the ninth century Ibn Abi Usaibi gives the biographies of 130 Christian doctors, 3 pagans, 3 Jews, and 5 Muslims. The numbers for the next two centuries were, respectively, 29, 4, 6, and 30, with significant increase of Muslims. The decline in the number of non-Muslims was due chiefly to their conversion to Islam. During the period from 800 to 1100, Arabic soon became the medical lingua franca. Muslims and non-Muslims not only used each other's medical books and studied together, but they also treated each other in all aspects of medical practice.

Observations of rituals in religion are sometimes misinterpreted. For example, when one of the leaders of the United Arab Emirates died, Western news media reported that the Arabs are still uncivilized because they do not use coffins for burial purposes, not realizing that Islam advocates that everyone has to be buried in white cloth, irrespective of his status as an individual. Usually a coffin is used to transfer a deceased person from one place to another but coffins are not used for the burial itself. According to Islamic traditions, a person is buried with a white cloth which is attired in a specific manner, depending on whether the deceased is a male or female. Three pieces

being used for a male's and five for females. In an environment where trees are scarce, this was and is a sound ecological practice.

3.7.2.2.4 History of Medical Education in Islam

(a) First method of entering into medical profession

During the period mentioned above, there were various ways in which a person might acquire a medical education. One of these was in a family that practiced medicine with sons, and sometimes daughters, learning the profession from their father. Some of the earliest Muslim doctors mentioned by Ibn Abi Usaibi were Al-Nadr and Al-Harath, a relative of Muhammad, who learned medicine from his father (Leiser, 1983: 49), he was killed at the battle of *Badr* in 624. In some families medicine was the major profession for several generations.

(b) Second method of entering into the medical profession, including some of the well known scholars in Islamic medicine

A second method of entering the medical profession was to teach oneself. A student who was interested in medicine simply read medical texts until he was satisfied that he had mastered the field. The author will elaborate on some of the well known scholars, namely, Ibn Sina, Ibn Ridwan, Al-Kindi and Hunayn ibn Ishaq.

1. Ibn Sina

Ibn Sina was self-taught individual. The West knows him as Avicenna, and he is most admired for his contribution to the field of medicine, both as a transmitter of knowledge of men like Hippocrates, Aristotle and Galen and as an original thinker on the subject. He is described as: “a scientific man, who attempts to bring the Greek theories to the level of that which needs to be expressed by the study of the concrete, when apprehended by a great mind” (Encyclopaedia of Islam, vol.III:914, as quoted by Wright, 1996:139).

He proved to be an extremely intelligent boy; **by the age of ten he had finished the Quran, many works of literature and the ‘Indian Numbers’ (arithmetic).** There seemed to be nothing that did not interest him, and nothing as well which, ultimately, he was unable to master. **He studied and wrote widely on philosophy, astronomy, mathematics, the Arabic language, music and several other domains of knowledge.** In his study of Ibn Sina, Gohlman lists in his ‘longer bibliography’ of Ibn Sina’s works 100 titles, and one need cite only a few to indicate the scope of his endeavours: *The Qanun* (on medicine), *The Shifa* (on philosophy), *Cardia Drugs*, *The attainment of happiness*, *The refutation of astrology*, *The Arabic language*, *The colic*, *Introduction to the art of music*, *Arithmetic*, etc. (Wright, 1996:140).

He lived in a very unsettled time, and moved from one patron to another, sometimes because he chose to do so and at other times because it was forced upon him. On one occasion he was no sooner elevated to the post of vizier in the court of the Amir Shams ad-Dawla in Hamadhan than the amir’s officers, who resented his high status and what they considered his haughty demeanor, turned upon him, and he was cast into prison for four months, during which time he was in peril of his life. It was his skill as a physician that ultimately restored his fortunes. After freeing and banishing him, the amir fell ill once again with the

colic. Ibn Sina was called back, and was able to relieve Shams ad-Dawla, whose gratitude was such that he replaced him in the post of vizier. The amir profited from the administrative skills that Ibn Sina was able to put to his service (Wright, 1996:141-142).

2. Ibn Ridwan

Ibn Ridwan's life was lived in an Egypt which was under the rule of the Fatimids who held the country for a period of some two centuries until they were finally displaced by Shirkuh and his nephew, the great Salah-ad-Din (Wright, 1966:149). Ibn Ridwan was a religious man who set aside time for the worship of God through contemplation of His creation and universe, and his resolve to behave in a righteous manner was firm, although he may be criticized for departing from this somewhat when disputing with his peers (Wright, 1996:152).

In approaching any problem he would **first hypothesize** on it and then analyze it in order to decide whether the hypothesis met the necessary conditions. If it did he went ahead, if it did not he rejected it. He claimed to meet any catastrophe first and foremost by **turning to God**; he would then think his way clearly and through all its aspects and, having done that, meet it without cowardice or rashness (Wright, 1996:153)

He recognized the need for physical exercise to maintain the body in health, and he undertook to perform sufficient sporting activity to ensure this. He would always rest a while after such sports before taking food.

His basic attitude to life in general was a simple one. One should attempt always to be modest, to help those in need and hasten to the rescue of those who solicited such help. He most valued the rich feelings he obtained as a result of the deeds he

performed. He spent his money on maintaining his household at a level which was neither extravagant nor miserly. In fact he attempted to keep to the middle road in all things, and to disperse charity to his kin and his neighbors (Wright, 1996:153).

He became "Chief of Physicians of Egypt," probably under the caliph al-Mustansir [1036 - 1094 AD], and he also became the caliph's personal physician. The extent of Ibn Ridwan's powers in this position are not known, his character and high principles must have had a very salutary effect on the physicians of his time (Wright, 1996:153).

Ibn Ridwan was a fervent admirer of the ancients; Ibn Abi Usaybi'a has quoted him on the seven principles by which a physician should govern himself (translation courtesy of Mr. Ahmed Juma'a as quoted by Wright, 1996:153-154):

1. He should endeavor to be perfect in his manners, and should have a healthy constitution. He must be intelligent and wise, show insight and be good natured. He must make frequent references to God.
2. He must be well dressed, well scented and clean in both body and dress.
3. He must be one who can be trusted with the secrets of his patients, never revealing their weaknesses or illness.
4. His desire to heal and cure the patients must be greater than his desire to earn money. His desire to cure the poor should be stronger than his desire to cure the rich.
5. He must be careful, keen on learning and excessive in his ardor to help and benefit people.
6. His heart [i.e. character] must be sound; he must be honest and truthful. When he enters the houses of the rich there should enter his mind nothing petty such as women and money; he must forebear against touching such things.

7. He must be trustworthy, as he is trusted with souls and money. He must prescribe no poison nor any substance of which he is ignorant, nor any abortive agent. He must cure his enemies with the same good intentions he applies to his friends.

Ibn Abi Usaybi'a's listing of the written works of Ibn Ridwan occupies more than two pages. As listed in Leclerc (as quoted by Wright, 1996:158-159), they include (to cite only a few):

<i>Elements of Medicine</i>	<i>Pandects of Medicine</i>
<i>Memorial of medicine</i>	<i>Notes on medicine</i>
<i>How to study medicine</i>	<i>Treatise on barley</i>
<i>Purgatives</i>	<i>Food and medicines</i>
<i>Preparing drinks, electuaries</i>	<i>Dyspepsia</i>
<i>Fevers (varieties, periods)</i>	<i>Tumors</i>
<i>Chronicity in disease</i>	<i>Elephantiasis in infants</i>
<i>Reply to questions on the pulse</i>	<i>Origins of science</i>
<i>Role of logic in science</i>	<i>Excellence of philosophy</i>
<i>Commentaries on Hippocrates</i>	<i>Commentaries on Galen</i>
<i>An autobiography</i>	<i>Astrology</i>

Ibn Ridwan has also written many books, one of his writings which was circulated in Europe was his "Commentaries on the Quadripartitum of Ptolemy;" his commentaries on Galen which he finished in 1041 AD (Grand'Henry, 1979, as quoted by Wright, 1996:159) were translated first into Hebrew by Samuel ben Tibbon in 1199 and later into Latin by Gerard of Cremona, the latter being published in Venice in 1496. He wrote another work, *Kitab an-Nafi Kaifiyat ta'lim sina'at at-Tibb* ("The useful book on the art of medical instructions") and his *Kitab Daf' madarr al-Abdan bi Ard Misr* ("The prevention of physical harm in

Egypt,") particularly the plague and the postulated causative factors (Wright, 1996:159).

Jacques Grand'Henry has recently produced a translation into French of the *Kitab Kiffayat at-Tabib* which he translated as the "Book on the method of medicine" (Wright, 1966:160). His translation of the section on therapeutics is available in Kuwait. In common with other physicians of the Islamic era, **Ibn Ridwan bases his therapy on the theory of the four humours**, the sanguinous, the bilious, the atrabilious and the serous (blood, bile, black bile and phlegm), on the detection and corruption or imbalance in the humours in a given organ and in either removing the corrupted humours or adding what is necessary to re-establish the proper proportions. In his words, "The method of treatment in each of our organs is the evacuation of corrupt humours and the renewal of the necessary mixture of the humours" (Wright, 1996:160). Ibn Ridwan describes four types of remedy (Wright, 1996:160-161):

1. *A poison: A substance which acts on the body when it reaches it without the body acting on it in turn.*
2. *A food: A substance that is affected by the body when it reaches it.*
3. *A food serving as a remedy: A substance which first acts on the body when it reaches it and is then affected by the body, which alters it.*
4. *A remedy: A substance which on reaching the body heats, cools, moistens or dries it.*

Ibn Ridwan also describes the four degrees of effect of a substance. Where its action is hidden, its effect is of the first degree. It is of the second degree when its action is slightly more evident, in the third degree when it is clear and evident and of the fourth degree when important and strong.

Ibn Ridwan could not afford a teacher and acquired his medical education solely from books. He declared that he was able to comprehend perfectly the medical books after first studying mathematics and logic. He also emphasized the importance of going directly to the original texts of Hippocrates and Galen (Leiser, 1983:51). In addition, he recommended that medical students learn several other subjects, from grammar to ethics and astronomy. However, the shortcomings of studying medicine by oneself exclusively from books are very obvious. Not everyone could be as brilliant as Ibn Ridwan or Ibn Sina, and besides, the interpretations of written literature were not always correct.

3. Al-Kindi

Abu Yusuf Ya'qub bin Ishaq al-Kindi was born in Kufah in about the year 801 AD., the son of Ishaq ibn al-Sabbah who was governor of Kufah (or Basra, according to Sleim Ammar) under the caliphs al-Mahdi (775 - 785 AD) and al-Rashid (786 - 809) (Wright, 1996:27). The name, al-Kindi, comes from his having stemmed from the Kindah tribe whose homeland was the southern part of the Arabian Peninsula. His family was an illustrious one, with his great grandfather having been a Companion of the Prophet Muhammad (P.B.U.H.), and with more distant royal ancestors. Although very little seems to be available on his early life, he is known to have moved to Basra to further his education; most of his working life was spent in Baghdad (Wright, 1996:27).

Al-Kindi was an Arab Muslim who lived during the era of the translation of Greek and other manuscripts in which Hunayn ibn Ishaq and other non-Muslims played such a great role. However, Al-Kindi is not known for his translation - although he almost certainly did some translation from Syriac into Arabic, and may possibly have done the same from the Greek language. He is instead

known as “The Philosopher of the Arabs,” and he was a “great Muslim thinker whose humanistic and scientific works helped shape the trend of the medieval Arab renaissance. His writings which include works on all current sciences of his time put him in a unique position to help establish the relations of Arab-Muslim philosophy with earlier philosophies and with the following generations of Muslim thinkers who deal with the metaphysical, and scientific problems” (quoted from Atiyeh G. N. in his ‘Al-Kindi: the philosopher of the Arabs’ as quoted by Wright, 1996:27).

Al-Kindi had the good fortune to live during the reigns of the caliphs al-Amin (809 - 13 AD), al-Ma'mun (813 - 833), al-Mutasim (833 - 842) and al-Wathiq (842 - 847) and the bad fortune to live during the reign of al-Mutawakkil (847 - 861). During this period, Atiyeh (1966) points out, communications throughout the Empire of Islam were much improved. New and good roads were built, and a postal system was instituted. Guide books to the various provinces were even produced. Al-Ma'mun established the “House of Wisdom” and the writings of the ancients became available due to the efforts of many workers of Syrian, Nestorian, Jewish and Sabeian derivation who were drawn to Baghdad. It was a Golden Age for Islam, and Baghdad was the pre-eminent city of the empire. During the period from al-Ma'mun to al-Wathiq, the social climate favoured al-Kindi and he prospered and produced written works on an astonishing range of subjects from philosophy to the art of cookery. He became a royal teacher, and perhaps royal physician as well under both al-Ma'mun and al-Mutasim, and he was appointed tutor of al-Mufasim's son, Ahmad (Wright, 1996:28-29).

That such a climate so amenable to the establishment of philosophical and scientific movements should have arisen would seem to be partly explained by the decision of the caliph al-Ma'mun to adopt in 827 AD some of the tenets of a group known as Mu'tazilites (“those who withdraw into themselves and stand aloof”). Mu'tazilism introduced the application of rationality to the interpretation

of religious dogma. They felt the law should be defended by having recourse to logic and reason. Ammar (1984, as quoted by Wright, 1996:29) notes that the doctrine of the Mu'tazilites was based on five essential themes, the first being that of the oneness of God. Implicit in this first tenet was the belief that God was an entirely transcendental being and as such He was inaccessible (this led them through a chain of reasoning based on the foregoing to proclaim that the Qu'ran had been "created," and it would seem that it was al-Ma'mun's proclamation of the "created" Qu'ran in 827 that stimulated so much resistance on the part of more orthodox Muslims). Secondly, they held that God does no evil and that His justice is divine. Thirdly, that man is responsible for his own acts, be they sinful or otherwise. Fourthly, they believed that the former implied among the lapsed faithful an intermediate state between faith and impiety and they called for repentance on the part of the sinful believer. Finally, they held it to man's duty to prohibit evil and do good. They believed it to be incumbent upon the Imam (the man who leads the prayer in a Mosque) to keep the faithful on the right path. Unhappily, when they were at the height of their influence, the Mu'tazilites themselves persecuted those who seemed to disagree with them, and this may have strengthened the hands of the more orthodox who opposed them on theological grounds.

Atiyeh (1966, as quoted by Wright, 1996:29-30) remarks that there were two ways open to the followers of Islam. The orthodox way led to the rise and development of sciences such as philology (science of language), history and jurisprudence. The 'less orthodox' way, which arose through the influence of the Greek, Syrian and Persian cultures led to the rise and development of philosophy, mathematics, astronomy, the physical sciences and geography. The Mu'tazilites (and al-Kindi) favored the second road. The more orthodox favored the first and opposed the second.

Al-Kindi was very sympathetic to Mu'tazilism, but Alfred L. Ivry (quoted by Wright, 1996:30) feels that he did differ with them. He writes, "While they {Mu'tazites} take their point of departure from the Qur'an and tradition and use whatever philosophical tools they feel appropriate to explain and support their faith, al-Kindi, it appears, begins from a philosophical body of literature and tradition, accommodating it to religious doctrine wherever he can and asserting religious dogma wherever he must, but essentially aiming for a coherent philosophical affirmation of the truth."

Al-Ma'mun was in his own right an intellectual, and he was doubtless drawn to the second road and Mu'tazilism because of its reliance on logic and reasoning. He is reported to have recounted a dream he had in which he spoke with Aristotle, and was assured by him that both philosophy and the Shari'a (law based on the Qur'an) led to the same truth (Wright, 1996:30).

Al-Kindi was known to have preserved his patience and good nature even in the midst of tempestuous arguments. He was not a courtier, in the sense that he felt no need to attend the persons of the sultan or rich businessmen in the hope of currying their favor. He was, of course, an aristocrat and, perhaps, he had no need to do so. As George N. Atiyeh (1966, as quoted by Wright, 1996:32) writes, "Al-Kindi was of a noble character unlike many of his contemporaries and conducted himself like a dignified, dedicated and disinterested person."

Al-Kindi wrote at least 16 treatises on philosophy. Among those on Aristotle were 'The human spirit', 'Sleep', 'Dreams and visions'. He also wrote on an 'Epistle on the soul'. He made a distinction between human and divine science in such a way that the two coexisted in harmony. He produced many treatises on music. Sleim Ammar (1984, as quoted by Wright, 1996:35) has reproduced an anecdote cited by Ibn Al-Qifti which illustrates how al-Kindi saw music as a therapeutic tool. He also notes that a group of free thinkers were

inspired by al-Kindi's work on music to demonstrate how it "could lead to spiritual understanding by awakening the soul to the harmony of the universe and inviting it to transcend material existence".

Al-Kindi has been described as "the marvel of his age". He is rightly considered **the first of the Arab philosophers** and as the man **who attempted to reconcile the science of the ancients with the teachings of Islam**. He held that "truth must be acquired from wherever it comes", and held true to this principal throughout his life (Wright, 1996:35-36).

4. Hunayn Ibn Ishaq (Johannitius)

Hunayn is known as the greatest figure of the ninth century. One could even state that he was one of the most splendid intellects and one of the most beautiful characters to be met with in History. The contribution of his works, their variety, their superiority, their importance and the tribulations he suffered so nobly at the beginning and during the course of his career all provoked interest and sympathy. If he did not create the renaissance movement in the East, no one else took so active a part in it or was as sure and as productive (translated from Julien Leclerc - *Histoire de la Medecine Arabe*, 1980, as quoted by Wright, 1996:39).

Hunayn served in high positions under several caliphs, and Ammar (1984, as quoted by Wright, 1996:41) states that he was the dominant figure in the first stage of the era of translations. As a writing physician, he also produced treatises on fever, phlebotomy, leprosy, hygiene, gynecology and dietetics as well as a pharmacopoeia. He is credited with the first Arab work on ophthalmology. He also took the first steps towards the organization and regulation of the Arab medical profession.

When Hunayn began his work in translating into Arabic, the Arabic language did not have either a vocabulary or a syntax designed to accommodate medical terminology. His knowledge of Arabic was very profound, and he developed the necessary scientific terminology and shaped a syntax suited to the ideas and concepts of medicine and science in general. This in itself has been described as a “priceless performance” (Wright, 1996:44).

Those who had an opportunity to comment on Hunayn’s work, praised him for his ability to communicate the true meaning of the texts on which he worked, and they attributed this ability to his knowledge in depth of Greek, Arabic, Syriac and Persian. Cyril Elgood (quoted by Wright, 1996:44) has written, “At the very moment when the liberality of a caliph offered unlimited means to ensure the scientific pre-eminence of Baghdad there was in Hunayn a man at hand who would give to the city that pre-eminence, and that not to Baghdad only, but to the whole Islamic world.”

Although Hunayn’s second career as a physician is now judged to be less important than his role as translator, he was court physician to al-Ma’mun and al-Mutawakkil, and on the basis of a work of his entitled, “Questions”, he was appointed chief physician of Baghdad according to Ibn Abi Usaybi’a (as quoted by Wright, 1996:44). Certainly, his abilities in this direction saved him from a dire fate during the reign of al-Mutawakkil.

When al-Mutawakkil became caliph, he was impressed by the reputation of Hunayn, whom he called to court and treated with great honor. However, al-Mutawakkil appears to have been a less than admirable man who was suspicious of all who might challenge him. One day, he summoned Hunayn to him and commanded him to prepare a cup of poison which he meant to use to rid himself of someone or other who was troubling him. Hunayn refused, and he was thrown into prison where he is said to have spent a year, working as best he could on his

translations. When this period had passed, al-Mutawakkil called him before him once again and this time he threatened Hunayn with death if he did not prepare the poison. Hunayn, refusing once again, said, "I have skill only in what is beneficial. I have studied naught else... My religion commands me to do good to my enemies, how much more to my friends. My profession is founded for the use of my fellowmen and only for their welfare. **It is incumbent upon a physician therefore never to prepare a noxious drug**" (as quoted by Wright, 1996:45). Al-Mutawakkil seems to have decided that Hunayn could not be forced to do his bidding. Perhaps he also realised that his physician was more valuable to him alive than dead, since by this time Hunayn's reputation was immense. At any rate, the caliph reassured him by stating that what he had done to him had simply been a test, and he reinstated him.

Of Hunayn's own original work, the most important pieces are considered to be '*al-Masa'il fi at-Tibb*' (Questions on medicine), 'Ten treatise on the eye' and '*Kitab al-Mawludine*' (Book on deliveries) in which he describes congenital deficiencies and birth defects, and wrote about prematurity and dysmaturity.

His speciality was the eye, and his ten treatises on the eye were gathered together at the request of Hubaysh. It is the oldest known systematic manual of ophthalmology. The subject of each treatise, according to Sleim (as quoted by Wright, 1996:48), are:

1. *Anatomy of the eye*
2. *Description of the brain*
3. *The optic nerves and vision*
4. *Galen's works on nosology, aetiology and symptomatology*
5. *Ocular diseases*
6. *Diseases of the conjunctiva*

7. *Properties of simple medicines*
8. *Remedies*
9. *The treatment of eye diseases*
10. *Description of how the book (above) came into being, and the preparation of compound medicines.*

If Hunayn ibn Ishaq accomplishments were to be described in two or three sentences, one might begin by stating that he used his profound knowledge of Arabic to conjure out of its essence an Arabic way of describing the concepts and particularities of scientific knowledge in general and medical subjects in particular.

(c) Third means of entering into the medical profession

A third means of entry into the medical profession was through classes in hospitals or medical schools. Hospitals came into existence very early in the Islamic era and reached a degree of sophistication that was not attained by the Christian West until much later. The first such institution may have been founded by the Umayyad Caliph Al-Walid I (704-15). The earliest documented hospital was built at Baghdad by Harun Al-Rashid (786-809); it had its roots in the hospital and medical school at Jundaisabur (Leiser, 1983: 53).

The earliest hospitals were usually established by Muslim rulers because only they could support the costs involved. These hospitals were by no means strictly in the hands of Muslims. The staff, students, and patients of the hospitals might include all faiths. The hospitals were given endowments (*waqf*) by their founders to provide for salaries, maintenance, and possibly stipends for the students, as was the case in other endowed institutions, such as the colleges of Islamic law.

Many of the physicians practicing in the hospitals were expected to devote some time to teaching, and certain sections of the buildings were set aside as classrooms (*majlis* in Arabic). One of the largest hospitals ever built in an Islamic country was that of the *Buwaihid Adud Al-Dawla*, which opened in Baghdad in 982 (Leiser, 1983:54). **Al-Razi** is described as being **instrumental in the creation of the *Adudi* Hospital** and as having insisted that it be a teaching institution. He often diagnosed patients there in the presence of students and then asked them how he had arrived at his conclusions (Leiser, 1983:54)..

As time went by, "medical schools" were introduced, meaning any place outside of a hospital where instruction was given by a teacher to students who were not exclusively his relatives. If they could afford it, aspiring physicians might pay a fee to join a class or hire a private tutor. Such classes or tutoring might take place anywhere. One Muzaffar Al-Din Mahmud Al-Amshati taught medicine in the ninth century at Cairo in the Mosque of Ibn Tulun (Leiser, 1983: 55).

With the advancement of knowledge, distinction was made between the "*mutabbib*," that is, someone trained only as a medical practitioner, in contrast to a "*tabib*," who had both a medical and philosophical education. The "*tabib*" was regarded as the physician par excellence. It is interesting to examine Arabic grammar in terms of the derivations of verbs, for example, the verb "*darasa*" means "to study," the verb "*darrasa*" means "to teach" and the word "*madrassa*" means "a place where teaching takes place." Hence the word "*madrassa al-tibb*" is a place where medical knowledge is taught. Other terminology utilized in the Arab world are, "*dar al-tibb*" meaning the house of medicine; "*dar al-hadith*" meaning the house of

tradition; "*dar al-qira'a*" meaning the house of Qur'anic teaching; and "*dar al-ilm*" meaning the house of science.

The sources for the period from the seventh to the fourteenth century are almost totally silent regarding the existence of independent colleges or schools of medicine (*madrassa al-tibb*).

There were also independent libraries that contained medical books, where students could study medicine on their own or under the guidance of teachers. In the large libraries, classes of all kinds, formal and informal, were held. The most famous of these were the "*Bait al-Hikma*" meaning the "**House of Wisdom**" and the "*Dar al-Ilm*" meaning the "**House of Science**," both built at Baghdad by the Abbasid caliphs in the ninth and late tenth centuries respectively (Leiser, 1983:59). Both contained translations of ancient Greek writings. It is also interesting to note that the Arab world also has "*Ilm al-Huruf*" which means the "**science of the Arabic letters**", which is a mystical procedure to try and understand the mystical interpretation of the Qur'an (Glasse, 1989:185). Some verses of the Qur'an begin with specific Arabic letters where no one knows the mystical interpretations of these letters except Allah.

The curriculum in medical training was focused entirely at the discretion of the teacher or self-taught student. The closest thing to universally required reading was the Sixteen Books of Galen. The Christian Al-Ruhawi, who lived in the ninth century, related that the Greek physicians in Alexandria realized that it was impossible for a student to master all of Galen's works, much less all medical texts. Consequently, they organized Galen's writings into sixteen books that were then abridged. Al-Ruhawi stated that anyone who intended to become a doctor must read these books (Levey, 1967:84-85).

There were many other books besides those of the Greeks. Al-Razi's book "*al-Hawi fi 'l-tibb*" called *The Comprehensive Book on Medicine* and Ibn Sina's "*al-Qanun fi 'l- tibb*" called *The Canon of Medicine* were especially popular. Al-Dinawari's (d. 9th cent.) "*Kitab al-Nabat*" called *The Book of Plants* was a favorite textbook and reference work in pharmacology (Leiser, 1983:63).

Many writers in the field of medicine took great pains to point out the need for doctors to have training in professional ethics. The oldest known surviving work in Arabic on medical ethics is Al-Ruhawi's "*Adab al-tabib,*" which is based to a great extent on Hippocrates and Galen (Leiser, 1983:65). Al-Ruhawi emphasized the importance of a firm belief in God which should guide one's every action. He described how a doctor should keep himself clean and in good physical condition, why he should keep medical records, and what he should expect for his fees. **Al-Ruhawi dealt with every aspect of the physician-patient relationship: developing mutual trust, respect, and confidentiality.** The doctor should be dignified at all times, truthful, and able to make patients feel at ease without misleading them. Al-Ruhawi also discussed the behavior of patients' visitors and warned against paying attention to any advice a visitor might give regarding a patient. The last part of the book is devoted to warnings about quackery, examinations, and the kinds of people suitable for medical training. With regard to the latter, he was particularly concerned with good morals and lack of desire to make a lot of money. He believed the best qualified are those who learn from their parents.

3.7.2.2.5 Religion and medical tradition

At the time of the appearance of Islam in Mecca, there were some Arabs with a knowledge of medicine. They had acquired this knowledge at the medical school

established in southwestern Iran by the Persian King, who had invited medical experts from Greece and India to teach. Scientific medicine was, therefore, known in Arabia, at least in Mecca (Browne, 1921, as quoted by Rahman, 1984:585).

Although a few medical treatments are attributed to the Prophet Muhammad himself, it was not until the late seventh century, about half a century after the conquest of Egypt by Muslims, that the Arabs came into direct contact with Greek scientific medicine in Egypt. It was during the Abbasid caliphate at Baghdad that, from the eighth to the tenth century C.E., systematic translations were officially sponsored by the government from Greek, Syriac, Persian, and Sanskrit. It was particularly Greek works in philosophy, medicine, and the physical sciences that formed the basis of the "secular" scientific intellectual culture of Islam that flourished so brilliantly from the ninth to the fourteenth century CE and influenced so durably and profoundly the medieval European tradition. Whereas in the eighth and ninth centuries the majority of medical men in Islam were Christians, Jews, or Zoroastrians who wrote in Arabic, later on Muslims themselves took over the medical art. It is also worth noting that, although Muslims had the philosophical and scientific Greek books translated into Arabic, works of Greek literature and religion were left alone. Islamic monotheistic belief did not allow Greek gods, goddesses, and their mythologies to enter their sacred territory and confuse its spiritual content (Rahman, 1984:586).

3.7.2.2.6 Other renowned scholars in Islamic medicine from the middle ages to the renaissance

One of the renowned philosophers and doctors was Ibn Sina (Latin, Avicenna; Hebrew, Aven Sina; d. 1037 C.E.): Despite the fact that God had given him the

highest possible gift, the gift of metaphysical thought, he spent his valuable time in medicine and writing prescriptions. **Ibn Sina himself was a man of intense and sincere religious views, which were based on his philosophic thought, but which he passionately held to be "true" Islamic views and in complete harmony with the world view of the Qur'an.** Those views were so intimately related to his medical outlook that he "lived through" them as ultimate truths: just before he died of his last illness, he gave up treating himself, saying "the manager of my body [i.e., the soul] has given up its management; no treatment will be effective" (Rahman, 1965, as quoted by Rahman, 1984:587). This has reference to his firm conviction that man is really the soul, which, during man's earthly career, manages and looks after its body; the body, in turn, helps the soul develop, but after its self-development, the soul does not need the body and discards it.

Ibn al-Nafis of Damascus (d. 1288), is another well known scholar who is credited with the **discovery of the pulmonary circulation of blood**, who wrote, in addition to his medical works, a spiritual biography of the Prophet Muhammad. In contrast to Ibn Sina, Ibn al-Nafis was highly orthodox in his religious belief. This is an illustration of the intimate relationship of religion with the medical profession (Rahman, 1984:587).

Fairly early in Islam there came into existence (tenth century C.E.) a curious mixture of the medieval tradition and the religious orthodox tradition known as "Prophetic Medicine." There are many books published under name of "Prophetic Medicine." The Shi'a have also contributed several works entitled "**Medicine of the Imams**" (Ibna Bistam, 1965, as quoted by Rahman, 1984:588). This tradition existed side by side with the scientific medical tradition in Islam. An example is a work by a famous traditionalist Abu Nu'aim, who is better known as the author of a pious work on tradition titled "**The Jewelry of Saints**" and who died in 1038 C.E.; he was thus a

contemporary of Ibn Sina. Although these works of Prophetic Medicine contain elements of "therapeutic" prayers and amulets, these constitute a tiny fraction of the whole. Their content consists of medical principles and doctrines originating in the scientific medical tradition and certain observations, **herbal prescriptions**, and other **natural cures** which claim authority from the Prophet Muhammad, but which Ibn Khaldun, the famous Spanish cultural historian (d.1406 C.E.), characterized as "*Bedouin Medicine*" (Rahman, 1984:588).

Muslims are frequently regarded by others as having a peculiar inclination towards superstitions. The questions often posed are: Why do Muslims use charms and protective devices, drinking for protection the water in which has been washed sacred by parts of the Qur'an written on a piece of paper and submerged in the water, or wearing a paper scroll on which a verse of the Qur'an is inscribed? Do these agencies have a power other than the power of God? Does not the Qur'an describe the Muslim as "He who fears only God?" Why then do we fear these sprites and *jinn*s and evil powers? Does not the Qur'an teach us that only God is to be feared and that other "gods" are non-entities? Some interesting answers to such questions are as follows: "Does not God give us skin and hair, yet He also permits us to protect ourselves against wind and rain with clothes and hats? Our use of such protection does not imply that He has failed (Cragg, 1958:240-241). Also we are told in the Qur'an: **"Seek refuge in the Lord of the Daybreak. From the evil of that which He created. The evil of the darkness when it is intense, the evil of malignant witchcraft, and the evil of the envier when he envieth"** (Qur'an S.113:V.1-5). These evil forces are again mentioned in the Qur'an (S.114:V.1-6). These are sure indications that a human being needs protection, and what better protection than the protection when reciting with understanding, the two above mentioned verses from the Qur'an. As man has been given knowledge about evil forces, so is he given knowledge about how to protect

himself from such evil forces, this is well demonstrated from the two short verses in the Holy Qur'an (S.113:V.1-5 and S.114:V.1-6). This has clear implications of the Islamic medicinal value that can be extracted from the Qur'an.

During the Arabic-Hispanic domination, Albucasis' book on surgery was considered by the developing European medical world to be a basic work of reference for many centuries throughout the Renaissance and later on. This book was considered an invaluable book of reference, almost a surgical "Bible," till the eighteenth century. While his work dealt with cauterization for many pathological conditions, emergency surgery, and the treatment of fractures and joint dislocations, his primary concern was about pediatric surgery involving congenital abnormalities such as hydrocephalus, hermaphroditism, and the like (Montagnani, 1986:41).

3.7.2.2.7 Cosmopolitan Character of the Islamic Civilization

An important dimension often overlooked or insufficiently appreciated by historians of Islam is the impact of the cosmopolitan nature of the Islamic civilization and culture on the development of science and medicine, especially on the latter. Islam is far more accommodating than one may realize, because it is capable of living and thriving in diverse cultures from the shore of the Atlantic, across Asia, Africa, in some parts of North America, Australia, and Europe. When reflecting on the number of people, from all over the world who attend *Haj* (Islamic Pilgrimage), it becomes obvious that Islamic civilization is an international and global civilization in which different nations and people of different races participate. In this respect, then, the civilization of Islam is a genuine precursor of the modern civilizations.

When reflecting on history, it is also interesting to note that the main language in which medical, scientific, and philosophical works were written was Arabic. For this reason, this entire medical literature is known as “Islamic medicine,” even though the very early carriers of scientific medicine in Islam were Christians, Jews, and Zoroastrians; even in later centuries, many belonged to these faiths (Rahman, 1984:595). Islam generated a comprehensive civilization, as it is broad and tolerant enough to cut across boundaries of race, color, and faith. This contrast with the situation in the modern West, where scientific development cannot be attributed to the Christian or Jewish faiths, but to the growth of a secular mind that sharply distinguishes between a “private faith” on the one hand and a “temporal” life on the other - a dichotomy unknown to Islam (Rahman, 1984:595).

3.7.2.2.8 “Acculturation” of Medicine in Islam and its Decline

Islamic medicine remained productive at a high level through the fourteenth century CE, its decline began in the fifteenth century. The decline of medicine was part of the general decline of natural and intellectual sciences in Islam. What brought about that decline is a question frequently discussed by the cultural historians of Islam, but probably no definite and clear-cut explanations can be given for the complex phenomena of the rise and decline of civilizations. There is some speculations to say that this decline was the result of external factors, chief among them being the Mongol invasion of the lands of Islam and the destruction of Baghdad in 1257 CE (Rahman, 1984:595). Although, the Baghdad caliphate was destroyed, this did not lead to the destruction of Islamic civilization in general: “indeed, from the ruins of Baghdad arose three brilliant and gigantic Muslim empires lasting from roughly the fourteenth and

fifteenth centuries to the twentieth century [in the case of the Ottoman empire] (Rahman, 1984:595).

Another important question is: **What is the relationship of religion to medicine?** Many Westerners have held that it was the narrow-mindedness of Islamic orthodoxy as it developed over time that stifled “rational science,” that is, philosophy and the natural sciences.

As the tradition of scientific medicine took firm root in Islam and culminated in the massive medical work of Ibn Sina (d. 1037), a highly interesting and extremely significant parallel development began in the field of medicine, which may be called “the phenomenon of the Prophetic Medicine,” which seeks, on the one hand, to bestow central religious value on medicine as representing the highest service to God, as we have noted; but which, on the other, probably also seeks to appropriate and claim medicine for Islam rather than allow it to remain the exclusive property of the Greek-based tradition in Islam. The authors of such works usually, but not exclusively, entitled Prophetic medicine, are all prominent orthodox religious scholars and leaders. Before we attempt to grasp the real consequences of this important phenomenon for the subsequent fate of medicine in Islam, we will do well to understand its nature and meaning. Of the two motivations behind the writing of such works just stated, namely, the desire to bestow high religious value on medicine and to appropriate medicine for Islam from “secular” medical men, the former can be demonstrated beyond doubt. Further, while there are works on “Prophetic Medicine” (*al-Tibb al-Nabawi*) by Sunni Muslims, such works by the Shi’a are not absent: the editor of the text “Medicine of the Imams” (*Tib al-A’imma*), published in Najaf, Iraq in 1965, mentions thirteen works of classical Shi’a writers and several others by relatively modern ones on Shi’a medicine (Rahman, 1982:83). These works by the Shi’a, who trace their medical traditions to Ali, their first Imam and son-

in-law of the Prophet, go back to the ninth century. Muhammad Mahdi, editor of the work just mentioned, narrates that Ali had put medicine on a par with the study of Islamic law (Rahman, 1982:83). Shi'a medicine appears to place an extraordinary emphasis on "nature-cures" and insists that medicines must be avoided so far as possible, that medicines themselves produce and can even become disease, and that medicines should be taken only when there is no alternative left (Rahman, 1982:83). It is important to note that **Islam's attitude to medicine is that there is a cure for every illness. It is our duty to search for this cure until we find it. So the very act of scientific research is Islamic medicine.**

Having discussed the historical perspective of medical education in the Islamic lands and its Islamic heritage, it is important to reflect on man and himself in view of the health status in Kuwait, the need for health awareness and the major health problems encountered in Kuwait.

3.7.3 MAN AND HIMSELF

3.7.3.1 Health status in Kuwait

The health status in Kuwait is rapidly changing from that of a developing country to that of a developed country. Life expectancy at birth is now 69 years, while the leading causes of morbidity and mortality are a mixture of diseases associated with developing countries and diseases associated with developed countries (Kuwait Health Plan, Vol. 4, 1982-2000: I-8).

3.7.3.2 Need for health awareness

Many of the leading causes of sickness and death result, at least in part, from the habits and lifestyles of people. Among these diseases or injury-causing habits are excessive smoking, reckless driving, eating excessively and/or imbalance diets, not getting enough exercise, and unhygienic food handling, especially for infants and children.

3.7.3.3 Major health problems

The following analysis of the health situation in Kuwait focuses on a number of major health problems. According to the Kuwait Health Plan (Vol. 4, 1982-2000: 11-12), these problems are summarized as follows:

(a) Children less than one year of age

- The infant mortality rate was nearly three times that of the USA and Scotland and four times that of Sweden.
- Poor perinatal conditions caused nearly a third of the deaths.
- Infectious diseases and pneumonia accounted for another one-third of the deaths.
- Among Kuwaiti Children deaths due to intestinal infectious diseases were 56 times more than in Scotland; and deaths due to pneumonia were 10 times more than in Scotland.

(b) For children in the 1-4 age group

- The motor vehicle accident death rate was five times more than in Scotland.
- Deaths due to enteritis and diarrheal diseases were nine times more than in Scotland.
- Among Kuwaiti Children the death rate from pneumonia was 8.4 times more than in the U.S.A. and Scotland.

(c) For children in the 5-14 age group

- Motor vehicle accidents accounted for nearly 35% of the deaths.

(d) For adults in the 15-44 years age group

- Motor vehicle accidents accounted for about 40% of the deaths.

(e) For women in the 15-44 years age group

- The maternal mortality rate was 14.5 per 100,000 live births. The total fertility was 5.75; i.e., every woman passing this age group was expected to give an average 5.75 live births.

(f) For adults 45 years and over

- **Ischaemic heart disease** constituted the **number one cause of death**.
- **Cerebrovascular and hypertensive disease** constituted the **second and third cause of death**.

(g) Skin and Eye diseases

- These were dominant in hospital out-patient visits and admissions.

(h) Respiratory and Digestive Problems

- Of the visits to the primary care units, 40% were for diseases of respiratory and digestive systems.

(i) Infectious Diseases

- Among the recorded infectious diseases, viral hepatitis, chicken pox, mumps, and salmonella enteritis have an incidence rate of over 100 per 100,000 population.

(j) A declining trend in death rates

- This was observed in 14 prominent diseases for the period 1975 - 1979. In all these diseases the death rate was higher for Kuwaitis than for non-Kuwaitis.

Reflecting from these observations, it is clear that the health status in Kuwait is rapidly changing from that of a developing country to that of a developed country, with the increase in motor vehicle accidents, ischaemic heart disease, cerebrovascular and hypertensive diseases.

3.7.3.4 Constraints on the development of health care

3.7.3.4.1 Constraints

- 1. Modern medicine and comprehensive care in Kuwait began less than forty years ago. Planning for such a rapidly evolving system involved a tremendous number of challenges.** The rapidly growing health care system requires both horizontal and vertical expansion. The horizontal expansion is required since the population is currently growing at a rate of 6.4% per year, necessitating a similar rate of expansion to double the existing services approximately every eleven years, in addition to covering any existing shortfalls. This situation is rarely faced anywhere in the world. The vertical growth is required to accommodate for new types of services or techniques available through advances in health and medical science.
- 2. Scarcity of local health manpower at all levels creates major dependency on expatriates with multi-national backgrounds.**
- 3. There is a scarcity of local resources for facilities, design, construction, equipment and supplies.**

4. There exists a deeply rooted commitment to provide free medical care and without any type of cost sharing or contribution by beneficiaries. This commitment has possible implications for over utilization and sometimes abuse of services.
5. A comprehensive national socio-economic plan is lacking, which would interrelate all developmental plans and coordinate the efforts of all agencies involved in health and health related activities.
6. A wide range of uncertainties concerning the future exists, mainly in terms of population size and structure, population distribution and emerging new health problems, and environmental hazards created not only by the rapid socio-economic development and urbanization, but also the Iraqi invasion of Kuwait.
7. The management information system, as well as the health systems organization and management, require strengthening and remodeling to keep abreast of the rapid growth in modern medical sciences.

With reference to the article "Panel approves 'segregation' bill" (Arab Times, Wednesday, November 17, 1993:3), the Kuwait Educational Committee at the National Assembly approved a draft bill to segregate male and female students at various faculties of Kuwait University. In this draft bill, they called on officials at the Ministry of Higher Education and Kuwait University to exert every effort to achieve this aim. Such a draft bill surely demonstrates a threat and challenge to the traditions of the society and its educational institutions. This has clear implications of the influence of cultural identity in the sphere of education when we consider the relation-axes model in terms of man and himself.

3.7.4 MAN AND HIS ENVIRONMENT

To understand human nature, we study not only its physical and psychological dimensions, but also its social and cultural manifestations. Human beings evolve as social animals and cannot maintain their health physically or mentally, unless they remain in contact with other human beings. More than any other social species we engage in collective thinking, and in doing so we create a world of culture and values that becomes an integral part of our natural environment. Thus, biological and cultural characteristics of human nature cannot be separated. Humankind emerged through the very process of creating culture, and this culture is necessary for its survival and further evolution (Capra, 1982:324).

3.7.4.1 Socio-economic development

In two decades the economic and social structure of the Kuwaiti people and their life style has drastically changed. The following points focus on some areas of change which have had a direct influence on the development of health services in Kuwait.

3.7.4.1.1 Industry

In the light of Kuwait's development policy, aimed at diversifying sources of income, expanding the economic base, and reducing its dependence on oil exports, the industrial sector receives special support and encouragement from the government through generous incentives and exemptions.

3.7.4.1.1.1 Shuaiba Industrial Area

Despite the emergence of new industrial areas in Kuwait, Shuiba Industrial Area remains the most important, because of the large number of heavy industries already located there. It is divided into two sectors, the eastern sector (Shuaiba Industrial Area) of about 10 million square meters, and the western sector (Mina Abdullah) of about 13 million square meters. There are 33 factories in the two sectors owned by 29 companies. The priority in the area is given to industries such as oil refining and processing, and petrochemicals, as determined by their export potential.

The Shuaiba Area Authority leases plots to factories and companies at nominal annual rents ranging from 75 fils/sq m in the western sector to 150 fils/sq m in the eastern sector.

The continuing changes in large-scale industrial activity (oil production and refining, petrochemicals) and secondary industries (fertilizer, cement, desalination, food processing, etc.) and the possibility of diversification in the future, all raise new problems of environmental safety, which deserve special consideration when planning future health services.

FIGURE 3.19 THE OIL REFINERY IN KUWAIT



3.7.4.1.2 Electricity and Water

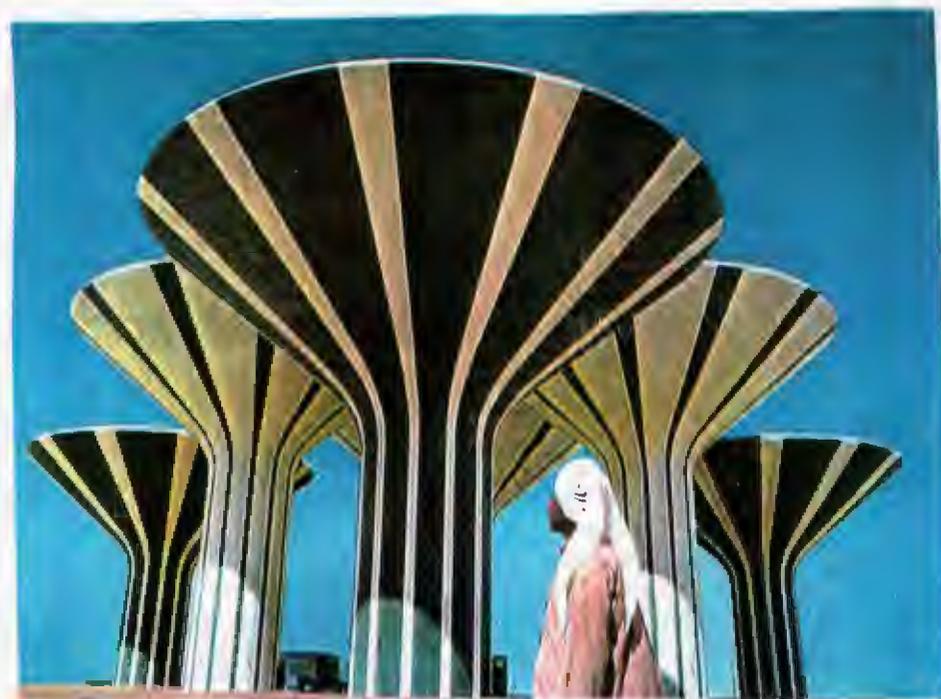
Kuwait is a desert country with no rivers. The supply of fresh and potable water is provided by the desalination of sea-water blended with 10% underground brackish water. Kuwait has been exploring its natural resources to meet its needs for electric power. The chemical energy in gas and liquid oil by-products has been the main source of generating electricity through complicated technical operations inside power-generating plants. The generation of electric power is closely linked with sea water distillation processes in huge plants at Shuwaikh, Shuaiba, and Doha.

In the past, Kuwait used to depend on rainwater and underground wells. But in 1907, when rainfall became scarce, Kuwaitis began to transport fresh water from the Shatt Al-Arab in Iraq using 49 large dhows (booms) which carried around 80 thousand gallons of fresh water to Kuwait every day.

The Ministry of Electricity and Water (MEW) has built 40 coneshaped towers in some areas of Kuwait to maintain pressure in the distribution network and satisfy peak water consumption. The towers are built in groups of 3, 6 or 9, each with a capacity of 600,000 imperial gallons, or 3000 cubic meters.

To cope with urban development in the country, the MEW constructed Kuwait Towers, which were designed to boost the reserves of potable water and ensure the supply of water to tall buildings, and at the same time to become a special architectural landmark for Kuwaitis and foreign visitors. The main tower is 187 meters high and the second is 140 meters high. The capacity of each is one million gallons of fresh water.

FIGURE 3.20 WATER STORAGE TOWERS



3.7.4.1.2.1 Underground Brackish Water

To control distilled water consumption and to make use of the underground brackish water discovered in large quantities in Sulaibiya, Shigaya, Abdali, Wafra and Umm Qadir, a separate pipe network has been set up.

Utilization of this underground brackish water started in 1953 as a supplementary source to distilled water. Brackish water may be used for irrigation, street cleaning, and for livestock watering, after being blended with distilled water. The total production of brackish water in 1987 was 24,000 million gallons. The assessment of Kuwait's future needs for potable water is now subject to more realistic conditions. It is interesting to note that in the drive to rationalize public consumption, potable water is now less used for irrigation purposes, and treated waste water is used instead.

3.7.4.1.3 Agriculture

Kuwait is an oil producing country with arid soil, harsh weather, no rivers, and insufficient irrigation water, yet it manages to achieve a good yield of crops at certain seasons. Amazingly enough, a surplus of vegetables is exported to various neighboring countries. Although the role of agriculture in the Kuwait economy continues to be limited, the results of expansion programs are encouraging; and the policy of subsidizing and ensuring access to essential foods for all residents is an important factor in the nation's health.

3.7.4.1.3.1 Growing Wheat in Kuwait

In response to the desire of H.H. the Amir of the State of Kuwait to grow wheat in Kuwait within the State's policy of providing for the basic needs of the people, to ensure food security to every Kuwaiti citizen, the Agricultural Affairs and Fish Resources Authority has set up a specialized permanent committee for this purpose.

3.7.4.1.3.2 Animal Husbandry / Fauna

Urban expansion in Kuwait and unrestricted hunting of the animals which used to live in the Kuwaiti desert, such as certain species of rabbit, the wolf, and the various types of desert gazelle which roamed for centuries, have led to the rapid extinction of wild animals. Similarly, the magnificent hubara birds which used Kuwait as a stopping-off place during their migration with hundreds of other species of migratory birds from tropical regions to North Asia are now extinct.

Though saddened by the extinction of these wild animals, Kuwait has compensated by the creation of new and flourishing forms of animal wealth. Helped by investment from the government, agricultural interests, and livestock companies, hundreds of Friesian cows were flown into the country from Holland and Denmark; millions of chickens were brought from Turkey, Europe, and Australia. These formed the basis of an astounding development in animal husbandry on a commercial scale. There are now about a quarter of a million head of cattle in Kuwait and local animal production covers a good percentage of the country's requirements.

3.7.4.1.3.3 Flora

There are some 400 species of plants and flowers growing in Kuwait. In spring the desert is transformed into amazing green meadows, particularly at Wadi Al-Batin which is landscaped with a spectacular carpet of yellow camomile.

In the northern part of the country and at Jal Al-Zor there are numerous plants to be seen, particularly Arfaj (*phaterium epapposum*) with its salty taste, and Al-Awsaj (*lycium arabicum* = L. Shawi), a strong thorny plant with small leaves and raspberry-shaped red flowers. Both plants are eaten by camels. Another plant to be found in the same area is the *heliotropium ramosissimum*, whose dry leaves are used by the Bedouins to make a tea-like drink and a poultice to cure venomous snake bites. The most spectacular species and the most impressive plant in Kuwait is the *cistanche lutea* with its large ostentatious display of flowers.

As the plants in Kuwait are subject to excessive heat and scarcity of water, the part of the plant appearing above ground is far shorter than the length of its root which needs to reach down to a permanent water source without reliance on new rainfall.

3.7.4.1.4 Housing and town planning

Housing has a direct influence on health status. The Kuwait Government's comprehensive policy includes major projects to increase the number of dwelling units to avoid overcrowding and to improve the quality of living. The National Housing Authority is working towards a goal of providing houses for all applicants over the next few years. As the planning of new areas of growth

continues to eliminate overcrowding and provide a better living environment, there are large development programs planned to enable the water supply, electricity, and sewage systems to match the growth in population and the plans for urban development.

3.7.4.1.5 Social Welfare

As a result of development and associated change, the extended family system is moving towards the nuclear pattern common in other developed countries. The loosening of family bonds has given rise to a number of **social problems**, such as those **involving care of the elderly** and an **increase in the divorce rate**. According to a study issued in 1993/94, the percentage of divorce cases is 29.9 where one in three marriages end in divorce (Kuwait Times, 10 October, 1996:2). Consideration is being given to possible strategies to counteract these trends. There are **social welfare services that are already well established by the government** which include: the development of cooperative societies; a wide range of welfare payments (for disability, sickness, scholarship, widowhood, etc.); and measures to improve safety and job stability in the workforce.

These policies have done much to promote social welfare, but as part of the other changes noted above, people are exposed to **new health problems as a consequence of changes in the disease patterns**. Some of the new problem areas in health have taken on the same pattern that **accompanies urbanization**; these have predominated in Kuwait and are: an enormous rise in injuries and deaths due to **road traffic accidents**, **hypertension and ischaemic heart diseases**; **ulcers, stroke, diabetes mellitus, cancer, allergies, tension and stress**. Therefore, the continuation of education in

health care management to keep abreast of the new trends is an important part of health care services in Kuwait.

3.7.4.2 The Impact of the Iraqi Aggression on the environment in Kuwait

The scenes viewed on television screens on 25th January 1991 left a deep impression of the tragedy which the Iraqi regime has inflicted on the environment when it deliberately spilled millions of barrel of oil into the Gulf.

The air pollution caused by the oil fires which the withdrawing Iraqi forces set ranged from 2 to 6 million barrels a day, and nearly half a ton of air pollutants (Kuwait News Agency, 1992:35). This is a unique criminal act in history, since the inhabitants of any one area had never before been exposed to such a huge quantity of smoke and a myriad of harmful chemicals as were the residents of Kuwait, not to mention the irreversible destruction of animals and plants.

The massive media campaign covering the environmental crime of the century which occurred in Kuwait attracted the attention of the whole world at a time when environmental awareness had matured in civilized societies. Environmental experts and scientists came to Kuwait from all parts of the world; symposia and study groups were set up in the largest research centers in the world in an attempt to examine and study the present and future effects of this environmental disaster as well as determine its scope.

Kuwait extinguished the last oil fire in November 1991, in record time and against all estimates predicting that such an operation might last as long as five years. This was possible only because of the massive efforts undertaken by Kuwait, the help of sisterly and friendly states, and the massive funding of almost two billion dollars for the cost of the operation. Putting out the fires

lessened the damage to the environment, but it does not mean that the problem is over.

FIGURE 3.23 BURNING OF OIL FIRES IN KUWAIT



Great harm was perpetrated by dumping the oil, and this was coupled with the smoke emitted from hundreds of burning oil wells in Kuwait which caused what may be called an “artificial night.” The smoke from the fires darkened skies reaching as far as the state of the United Arab Emirates, which is nearly 500 kilometers from Kuwait. This phenomenon had adverse effects on coral reefs and marine bushes, which means that future generations of fish and shrimp will be effected because coral reefs are the natural habitat where many species of fish and shrimp reproduce. In addition, all the marine turtles which live in the Gulf are threatened with extinction; according to environmentalists, it is well-known that these turtles are harmed because their skins are very sensitive to oil (Kuwait News Agency, 1992:38).

United Nations reports indicate that the Kuwait infrastructure for environment protection has been extensively destroyed because of the Iraqi invasion. The available supplies of drinking water were destroyed, the sewage system was damaged, and there was a dismantling of the environmental monitoring network. Experts from Harvard University have found a rise in bacteria counts on Kuwaiti beaches because of the destruction of the sewage system (Kuwait News Agency, 1992:40).

One of the most atrocious Iraqi practices against life and the environment, after the torture and killing of human beings, was the killing of the fauna and flora. The palm trees that were planted along the coasts and streets in Kuwait before the invasion were completely neglected. Despite the fact that Kuwait does not have a climate and soil suitable for the growing of plants; yet Kuwait overcame all these obstacles through experimentation and the use of modern scientific methods in agriculture and achieved great success in the field. In the eighties, Kuwait began a massive greening campaign which changed the cities, suburbs and beaches of Kuwait into beautiful green oases.

It is difficult to give a complete description of the ravages on the natural environment and the impact of the Iraqi aggression on it, since some specialists are still conducting studies of the pollution of the land and water and continuing environmental surveys to assess the damage, and this may require years of work.

After having discussed man and his environment in terms of industry, electricity and water, agriculture and the impact of Iraqi occupation on the environment in Kuwait, it is important to reflect on man and fellowmen.

3.7.5 MAN AND FELLOWMEN

3.7.5.1 The health care professional - patient relationship

In early Islam, a great emphasis was put on the importance of developing a cordial relationship between the health care professional and the patient. A Muslim physician was encouraged to be willing to forgive the wrongs of others, to counsel all, to be truthful, honest, objective, merciful, and considerate of others' needs (Ghazizadeh, 1992:228). The patient was considered a unique individual whose signs and symptoms and treatment management were undertaken carefully and according to his situation and condition. The genuine interest shown by the Muslim physician towards his patient led to further emphasis on the aspects of family-doctor relationships, initiating better communication between the physician and the patient. This important **humanistic element of the profession, which was highly recommended and upheld by the Muslim physician, seems to be much neglected by modern medical practitioners in developed countries** (Anees and Hamarneh, 1983, as quoted by Ghazizadeh, 1992:228). **This has vociferated many authors** (Barman & Hendrix, 1983; Clawson, 1994; Davis, 1988; Guccione, 1980; Lawrence & Helm, 1987; Magistro, 1989; and Purtilo, 1984 & 1989) **to address affective domain in health care when training health care professionals.** Thus, the affective domain in health care plays a very important part in our daily lives.

3.7.5.2 Some practical aspects of Islamic medicine

The well-being of both the individual and society is an important part of Islamic health education. A devoted Muslim is one who is careful about health. In Islam, personal appearance and physical cleanliness is just as

important as spiritual purity. The Islamic instructions in cleanliness and health include every aspect of human life. **Islam has given so much importance to cleanliness, that it has been considered to be an object of faith.** Prophet Muhammed is reported to have said that, "Cleanliness is from faith" (Elbanna, 1979, as quoted by Ghazizadeh, 1992:228).

All prohibitions, such as eating the flesh of dead animals, eating pork, drinking alcohol, gambling, abortion, adultery, incest, etc., are for the protection of the individual's and society's health and well-being.

A person with sound reason and logic would be able to explain why alcohol, gambling, adultery, and incest would be prohibited. Islam is a religion which advocates that Allah is Most Gracious and Merciful, this phrase being repeated many times in the Qur'an; indeed every chapter begins with this phrase. In extreme cases, such as life and death situations, an individual may be exempted from some of the prohibitions. For example, abortion may be allowed when the health of the mother is in danger, or one may eat or drink a prohibited substance in extreme circumstances as explained before.

3.7.5.3 The relation between man and fellowmen in terms of family relations

The original Muslim family was patrilineal, endogamous, polygamous, and male-dominated. Its main sources were the Qur'an and pre-Islamic Arabic ("*jahiliya*") customs. Islam, while abolishing many ancient customs, preserved those it deemed beneficial to the community. The legal basis of the **Muslim family has been enriched over the centuries by other sources of Muslim law: the "*sunnah*"** (the actions and words of the Prophet), "*kyas*" (the making of religious law on the basis of other laws), and "*ijmaa*" (agreement of all the '*ulamas*'). Since the first century of the Hegira, this family has been

changing. The first changes of a legal order arose from the distinction between Shiites and Sunnites and the division of the latter into four schools (Behnam, 1985:555).

Since the 19th century, **Islamic countries have, for various reasons, been fascinated by the West.** The end of the 19th and the beginning of the 20th century were marked by a great influx of new ideas. These new ideas may be recognized as "modernization" which has become synonymous with the word Westernization. Changes in the family were negligible until the Second World War. Since then, as Islamic countries have opened up to the West and/or gained political independence, **efforts at modernization have produced some fairly significant changes.** The contemporary Islamic family finds itself confronting cultural, social, and economic changes linked to the development of the society of which it is a part. **Its situation is culturally ambiguous, and this produces parallel and sometimes contradictory attitudes and behavior patterns.** The conflict between old and new, between tradition and modernity, has made its home in the heart of the family. The new has not penetrated enough to triumph, but quite enough to transform its problems altogether (Behnam, 1985:556).

The extent of change in Kuwaiti society in general and in family patterns varies from one segment of the population to another. This most certainly depends on their experiences and the opportunities to interact with the outside world which are so often found in their own country. **There are many views regarding the influence of modernization on the Arab family.** Some believe there has been no change of the Arab family by urbanization and industrialization. Patai (1962:84) perceived the Middle Eastern family as having remained the same, having been composed of largely the same personnel, structured along the same lines, fulfilling the same functions, and commanding the same loyalty of its members. Patai (1952:1-21) listed six

characteristics of the typical Middle Eastern family: (1) extended, (2) patrilineal, (3) patrilocal, (4) patriarchal, (5) endogamous, and (6) occasionally polygamous. Another group of commentators has pointed to rural-urban differentials, with the urban family being most affected by modernization. Berger's (1962:131) view was that the impact of change on the family was limited and that the extended family was still the general pattern in the Arab world, with only the "urban educated classes" forming nuclear families. El-Daghestani (1963:583, as quoted by Al-Thakeb, 1985:575) took a similar stand in suggesting that the nuclear family was most frequently found in towns and that economic conditions and lack of education were the main factors responsible for the prevalence of extended families on a "fair scale" in small towns and villages.

Unlike other analysts of the Arab family, Goode (1963:371) suggested that because of economic and mortality factors, extended-family households had never been the general pattern. He considered the assumption that the extended family is predominantly in Arab societies a "description not of reality but of ideals" (Goode, 1963:123). Goode also thought that many Arabs lived in an extended family at some time in their lives and he saw finances as a very important obstacle towards nuclear family structure. He suggested that a survey at any given time of a cross-section of all the families of a given region would probably show that a minority of families were joint (Goode, 1963:124). He also goes on to say that the nuclear or, as he calls it conjugal family was the normal aspiration for educated Arabs. Change in the family institutions, especially in the position of women, had been evident, he argued, since the 1950's, partly as a response to Western opinion, but more as a result of political revolution.

Al-Thakeb (1985:575) states that the different points of view by different analysts of Arab-family are only to be expected, as most of them use few or no data. He felt that their competing assumptions require a search for empirical

evidence. He examined a number of key assumptions regarding the Arab family in general, and the Kuwaiti family in particular. He raised questions such as: What type of family is prevalent? Are kinship ties as wide and strong as they assumed to be? And how has change affected these relationships? Have there been changes in attitudes, role perceptions, and behavioral patterns among Kuwaitis? Are they adapting to the norms of the conjugal family? What are their attitudes towards ties with kin, love, and free choice in marriage, the dowry, marriage among kin, parental authority, polygamy, and equality of the sexes? Kuwait is particularly well suited to an examination of the impact of urbanization and modernization on the family because these processes have moved there with a speed and intensity rarely found in other countries.

In Kuwait the extended family has always been in the minority. A study of a random sample of 341 households in six residential areas in Kuwait revealed that only 22% were extended and the majority (59%) were nuclear (Al-Thakeb 1976b:81-91). The nuclear family was not only statistically predominant, but also the ideal for most of the sample. His other study revealed that even among those who lived in extended families, a majority preferred the nuclear form (Al-Thakeb 1976a. as quoted by Al-Thakeb, 1985:576). This is contrary to the assumption that the extended family is the ideal, and it is interesting in that the economic and demographic conditions are much more favorable to the extended family in Kuwait than in other Third World societies. The average income is high, and the average household size was about eight according to the 1975 census.

Kuwait is a country with a high-fertility and a low mortality rate (Al-Thakeb, 1985:576). Also, since Kuwait is a small country, it is difficult to talk about rural-urban differences in family patterns, but socioeconomic and educational differences are important. Data from the Kuwait survey show that 64% of upper-middle and upper-class families were nuclear. This type of family was found in only 50% of the lower and lower-middle class families. It was in these strata that

one encountered the type of family known for its traditional functions of care and support; a married person might have living with him, besides his wife and children, a retired parent, unmarried brothers and sisters, divorced or widowed sisters, and/or retired or unmarried uncles or aunts. A higher proportion (about 30%) of the illiterate lived in extended families than of those with college degrees (17%). Nuclear-family residence was more typical of the young (30-39 years of age) than of those 50 years of age or older (Al-Thakeb, 1976b. as quoted by Al-Thakeb, 1985:576).

3.7.5.3.1 Family-kin Relationship

There are American family sociologists who have suggested that urbanization and modernization lead to a breakdown of family-kin relations, but empirical studies in the West have refuted this idea. In the Arab and Muslim world, there are few studies concerned with this subject. Baer (1964:20) argued that urbanization, modernization, and differentiation lead to the weakening of the relationships between family and kin. Loyalty to the "*hamula*" (a patrilineal descent group composed of several extended families that have a common ancestor), he said, is replaced by economic and political loyalties as cities grow larger and more modern. He cited the establishment of associations and clubs in Arab cities as a factor in the dissolution of the hamula. Goode (1963:129) stated that, **although the trend in the Arab world was towards the independent conjugal family, this did not mean that relationships between such families were strained.** He argued that the family-kin relations were strong even among the educated, noting that **there was an important link between grandparents, married children, and grandchildren and a consciousness of belonging to a particular kin.**

In a study of 526 male and female heads of households in Kuwait, it was found that a strong relationship existed between the immediate family and the

kin network. Eighty percent of the respondents visited their kin daily or weekly. High rates of interaction were characteristic of siblings, the upper socioeconomic strata, the educated, and males. This was facilitated by proximity of residence; 43% of respondents had relatives living next door, most of them siblings (Al-Thakeb, 1982:7-69). This kind of arrangement affords the advantages of both the nuclear and the extended family. Living next door to kin but not with them helps reduce conflict and friction; it gives members of the nuclear family greater freedom in the upbringing and socialization of children. This pattern of living leads to stronger relations between family and kin and increased economic cooperation. It also helps to prevent isolation and loneliness. In addition, it gives members of the family the feeling that kin are there when needed but have less opportunity to interfere in family affairs.

Assistance of kin in illness, child care, financial need, search for employment, or personal and business problems is widespread. Half of the respondents indicated that they would consult a relative in such a situation. As might be expected, this pattern of help was most frequent among siblings, with parents being second in all categories. Business relationships were relatively strong, especially among siblings; 24% of those who had business had relatives as partners. Among those who worked for the government, 27% had relatives in the workplace. One of the best indicators of the strength of ties between Arab family and kin is intermarriage. About 48% of the sample were married to relatives, most of them first cousins. Although conflict between family and kin is very difficult to assess, respondents reported that it was rare and short-lived. Within this wider network of kinship, relations with in-laws were of special interest. Data from the United States show that husbands have more contacts with in-laws than with their own kin, while wives follow the opposite pattern. In Kuwait the trend among both husbands and wives was towards the husbands' kin (Al-Thakeb, 1985:577). One of the Islamic wisdom is to marry from afar to avoid weak progeny (Alfi, 1981:337).

Marital relations, business partnerships, and contacts during leisure time are relatively strong. However, a small minority show some deviation; those most affected by urbanization and modernization, namely, the educated, the young, and the upper socioeconomic strata, appear less enthusiastic about marrying relatives or about spending leisure time with them. However, this latter group do demonstrate the highest proportion of contact and assistance to kin in time of need (Al-Thakeb, 1982. as quoted by Al-Thakeb, 1985:577).

3.7.5.4 Sociocultural influence on the training of health care professionals in Kuwait

Kuwait has a comprehensive and well-structured **health care system**. However, to deliver such medical care the country **relies on expatriate medical health care professionals**. There are many sociocultural influences on the training of health care professionals in Kuwait, and the author will discuss some of these sociocultural influences.

3.7.5.4.1 Problems of training health care professionals in Kuwait

In an affluent and developing country such as Kuwait, where the Government is the primary employer, there are many employment positions available which do not require long periods of training. Therefore, a **commitment to any health profession, especially the medical profession, seems to be less attractive, particularly to the male Kuwaitis**. The relatively high number of Kuwaiti women opting for the medical profession is partially related to cultural aspects in a sex-segregated society like Kuwait (Bana *et al.* 1990:485). Health care professions such as medicine, radiological sciences, medical laboratory

sciences, health information administration, and physical therapy are considered respectable and prestigious for women. According to a field observation, the situation is similar in Pakistan (Papanek, 1971:571): "Medicine and teaching are found to be the most important high prestige occupations for educated women because of the special needs of a female clientele in a sex-segregated system." Similar situations have been observed in other Islamic countries such as Saudi Arabia (Gallagher, 1988b:72).

Kuwaiti women health care professionals do contribute to a large extent to the needs of the Kuwaiti health service. The number of women in the health care professions is increasing substantially each year. However, the **continuous decline in the number of male Kuwaiti health care professionals is worrying and may have an unfavorable effect on the future of the health sector.** The extensive family responsibilities expected from Kuwaiti women health care professionals do at times cause restrictions on their capacity to improve their qualifications or to provide health care services at an optimal level. Studies of women medical practitioners in the USA have shown that family responsibilities were found to hinder their career development (Norcini *et al*, 1985:115-118) or cause a change in their career plans (Nadleson *et al*, 1979:400-406). Moreover, women doctors seem to work fewer weeks per year and interrupt their careers or work part-time more often than their male colleagues. In addition, a lower ratio held a board certificate (Ellsbury *et al*, 1987:895-903).

3.7.5.4.2 Segregation of sexes

In Saudi Arabia where cultural laws and traditions are adhered to strictly, the unique system of segregation of male and female medical students was adopted. In practice this means the repetition of tutorials, lectures, and case conferences. As far as possible, the same lecturer gave both sessions, therefore

preparing the same session only once. Also allocation of lecture theaters had to be scheduled in such a way that male and female students did not meet, which required opening extra lecturing rooms. Clinical rounds were also conducted separately in groups of six to eight students of the same sex. Males were scheduled for the morning rounds, the females for the afternoon rounds, separated by lunch and mid-day prayers. It is interesting to note that male lecturers teach female students and *vice versa*. Also, that the students and staff accepted and adapted to the idea of segregation readily (Kassimi, 1983:234).

In Kuwait, the segregation of sexes is not applicable to such an extent; however, male and female students attend the same theoretical classes, but practical classes are separated where students are expected to undress, as in physical therapy. In practical situations, there is usually a common demonstration either on a male student (with his permission) or on a live paid model. After the common demonstration, the male lecturers conduct the male practicals and the female lecturers conduct the female practical. It may be peculiar to understand this type of segregation but this is typical of Arab culture.

In developing Arab countries, segregation of the sexes can be more effectively achieved by establishing faculties of medicine admitting only female students and recruiting female staff. Such plans are under consideration at the moment in Saudi Arabia, not forgetting of course, the existence of such facilities in Pakistan (Fatima Jinnah Medical School), India (Lady Hardinge Medical School), and, until recently (1948), the Royal Free Hospital School of Medicine, England (Kassimi, 1983:234).

The need for segregation may be motivated by understanding the experiences of students and health care professionals with inappropriate patient sexual behavior which have been documented in literature (McComas *et al.* 1993:32-39). The

findings in this study indicate that inappropriate patient sexual behavior (IPSB) occurs to a significant extent, at all levels of severity, to health care professionals of all levels of experience and to both women and men in the work environment (McComas, *et al.* 1993:38). This finding indicates that inappropriate patient sexual behavior cannot be dismissed as merely a women's issue. It is a professional issue, and must be addressed as such. In response to this problem, workshop material have been developed and educational sessions on sexual harassment have been introduced in the clinic (McComas, *et al.* 1993:40). It is interesting to note that sexual harassment in the clinical setting has been a problem for a long, long time but was "shielded by silence" (Hotelling, 1991:497-501)

Furthermore, studies of sex differences in non-verbal communication have shown that women in general are more likely to lower or avert their eyes during conversation with men and they are relatively more hesitant in touching, pointing or staring at a member of the opposite sex (Thorne & Henley, 1975. as quoted by Bana *et al.* 1990:485). The Islamic code of conduct and social patterns in Kuwaiti society may enhance these attributes in many Kuwaiti women; and some Kuwaiti women health care professionals may therefore feel less comfortable in examining male patients. Similarly, some Kuwaiti male patients may feel intimidated when treated by Kuwaiti women health care professionals since they share the same cultural values. **"Kuwaiti Health Services already follow a sex-segregated system for primary health care clinics"** (Bana *et al.* 1990:485): usually the male patients are attended by male health care professionals and women patients by women health care professionals. Even the **waiting areas for patients are separated between sexes.** (The new family medicine system is in the process of changing this routine.) Kuwaiti women doctors may therefore be inclined to go for specialties which provide services mainly for women and children; traditionally this is the common specialty choice for most women doctors in other parts of the world.

3.7.5.4.3 Training of Kuwaiti medical doctors and their specialty choices: sociocultural impact

The increase in the number of female medical graduates has decreased the ratio between sexes of the traditional specialty choices. In a survey of specialty choices, carried out in 1985 in the USA, the majority of female doctors were found to be practicing internal medicine, pediatrics, psychiatry, family medicine, and obstetrics and gynecology, while the majority of male doctors were found to be practicing internal medicine and surgery (Martin *et al.* 1988:333-43). Similar specialization preferences are emerging for Kuwaiti medical practitioners, postgraduate trainees, and undergraduate medical students in the Faculty of Medicine. Until 1986, the most common specialty among practicing Kuwaiti female doctors is pediatrics, followed by internal medicine and obstetrics and gynecology. A very small number of Kuwaiti female practitioners opted for surgery (Bana, *et al.* 1990:486). Similarly, for Kuwaiti male doctors, the most common professional choice was internal medicine followed by surgery (CSO, 1987, as quoted by Bana *et al.*, 1990:486). In a recent survey of 476 undergraduates (90% of the students) enrolled in the faculty of Medicine at Kuwait University, 19% male, as compared with 8.5% female preferred surgery as their future career; 11% female, as compared with 3% male students expressed pediatrics as their specialty choice; and 6% female, as compared with 0.5% male showed interests in obstetrics and gynecology as their planned career. There were 27% of the students who were undecided about their future specialty choices (Al-Mulla *et al.*; 1989. as quoted by Bana *et al.*; 1990:486).

The low number of Kuwaiti male graduates, the traditional trend in the medical specialty of Kuwaiti male and female practitioners, as well as sociocultural influences on their professional choices, are very likely to lead to an **imbalance**

in the future composition and structure of Kuwaiti's Public Health Services. This would imply that in order to accommodate future health care needs of the Kuwaiti population, the existing health care services will have to rely on expatriate health care professionals for the foreseeable future (Bana *et al*; 1990:486).

The training of Kuwaiti health care professionals, especially medical doctors, is impeded by the socio-economic milieu of Kuwaiti society. However, the Health Science Center at Kuwait University has taken on the responsibility of educating and training Kuwaiti nationals. The Health Science Center is actively engaged in trying to find ways to curb the high drop-out and failure rates of its students. The multiple repetition of courses by an alarmingly large proportion of the intake indicates that some of these students may have certain limitations and therefore cannot cope with the high demands of medical training.

3.7.5.4.4 Nursing as a health care profession in Kuwait

Nursing as a profession in Kuwait, as in Saudi Arabia, is viewed as an essential but "socially degrading occupation," to be pursued by expatriate females (mostly Indian and Filipino) because they feel it involves menial work and interaction with non family males (Gallagher, 1988a:396). This attitude may be slowly changing in the author's view, because she had an opportunity of participating in the screening of students for the Allied Health Professions at Kuwait University, where, in one interview session, two Kuwaiti students chose nursing as a first choice because their mother or aunt happens to be a nurse.

3.7.5.4.5 Language of instruction

The language of instruction in most medical schools in the Middle East is English, except for some countries like Syria where the instruction is in Arabic. Through worldwide observation one would note that **“in today’s scientific world the language is no longer French or German, but English”** (Whitehead, 1949:147); and it has been suggested that English has become the international language of medicine and science. The majority of the enrolled students at the Faculty of Medicine, Kuwait University, have Arabic as their first language, with schooling entirely in Arabic (Ahmed *et al*; 1988:506). Arabic is a Semitic tongue and it is often difficult to find a correct English translation for Arabic terms. When reflecting on how Hunayn Ibn Ishaq (one of the Islamic scholars) began his work in translating into Arabic, the Arabic language did not have either a vocabulary or a syntax designed to accommodate medical terminology. His knowledge of Arabic was very profound and he developed the necessary scientific terminology and shaped a syntax suited to the ideas and concepts of medicine and science in general. This in itself has been described as a **“priceless performance”** (Wright, 1996:44). However, nowadays there is a great shortage of Arabic medical and scientific literature caused by many decades of preoccupation with wars and foreign invaders (Kassimi, 1983:233). This and other factors make it more beneficial to instruct Kuwaiti student health care professionals in English, for the time being at least. It is interesting to note that the Arabs do acknowledge the defects in their language in the fields of science, as has been demonstrated by a survey conducted by the Faculty of Medicine, King Abdulaziz University, with fourth year male and female students taking part (seventy-five in all). The question was asked: **“Would you like to be, and should you be taught medicine in Arabic?”** The answer in 100% of the cases, with both males and females, was **“No”** (Kassimi, 1983:234).

Problems associated with learning scientific information when having English as a second language have been highlighted. Also it is interesting to note that at the sixth Saudi Annual Medical Conference held in Jeddah in March 1981, attended by 1200 doctors from all over the world, there was a **strong inclination towards Arabisation of medical instruction**, not only at Saudi Faculties but also at Medical faculties throughout the Middle East (Kassimi, 1981:122). It was felt that Arabisation was desirable but that many constraints have to be overcome with time. Presently, problems associated with factors such as motivation, study habits, and attitudes towards education are under investigation. The aim is to delineate the problems of students and then to devise the necessary corrective measures through student support programs.

3.7.5.4.6 Arabisation of medical education

The Kuwaiti Public Health Minister in 1996, Dr. Abdul Rahman Al-Muheilan, at an opening of the conference of Arabisation of Medical Education addressed the attendees concerning the **importance of Arabising medical education** in the Arab World (Arab Times, Tuesday, April 9, 1996:5). This three-day conference was organized by the Kuwait-based Arab Center for Medical Literature (ACML), the Kuwait Foundation for the Advancement of Sciences (KFAS), the Islamic Medical Sciences Organization (IMSO), and the World Health Organization (WHO).

The Minister of Public Health expressed his belief that the **Arabic language is capable of absorbing all science, including medical sciences**, pointing out previous Arab and Islamic medical researches and publications of Abu Baker, Al-Razi, Ibn Al-Nafis, Ibn Sina, and the doctors of the Fertile Crescent and Al-Andalus, which he said were translated into English and French.

The head of the organizing committee and the secretary general of the Arab Center for Medical Literature (ACML), Dr. Abdul Rahman Al-Awadi, expressed the belief that **“medicine, out of all sciences, should be taught in the native tongue”** (Arab Times, Tuesday, April 9, 1996:5). He underlined that opposition to the Arabisation of medical sciences was less than before, after its pros were proven to be greater than its cons.

The Arab League director of the Health and Environment Administration, Ahmad Safwat Abdul Aziz Safwat, said the Council of Arab Health Ministers realized the importance of Arabisation and adopted many resolutions in this regard. Among these resolutions, he said was entrusting the Arab Center for Medical Literature (ACML) with the responsibility of Arabisation in full and in cooperation with the World Health Organization (WHO), the East Mediterranean Regional Office (EMRO) and other competent bodies.

From the observations above it is clear that **modernization is influencing the cultural traditions of the Kuwaiti society, especially with regard to their language.**

Having discussed the relation-axes model in terms of man and fellowmen in the area of health care professional - patient relationship, family-kin relationship and sociocultural influences on the training of health care professionals in Kuwait, it is important to reflect on man and the transcendental.

3.7.6 MAN AND THE TRANSCENDENTAL

The question of the legitimacy of the spiritual dimension in health has long been debated by health care professionals, and a trend to develop and affirm its

existence currently exists in the system of health care training. While this concept is not widely accepted, health care professionals have given greater recognition to the spiritual dimension as an important aspect of well-being, recognizing that spiritual considerations can be significant factors in health-related decision-making. Some health care professionals view **spiritual health as important in our world because of the “sense of alienation and lack of connectedness characterizing today’s society”** (Goodloe and Areola, 1992:221). Literature available on the topic of spiritual health is sparse, and health care professionals who advocate the importance of this aspect must continue to explore the scientific relevance of this dimension of health.

Osman and Russell (1979:359) have challenged health care professionals with the following statement: “...the time now has come to accept the spiritual as an important aspect of individual and corporate life and a legitimate dimension of well-being.” Their statement contains two admonitions: (1) to accept the spiritual as a viable dimension of health; and (2) to better define and describe the dimension through scientific research and teaching to identify and enhance the spiritual qualities of people. **These admonitions have resulted in a stronger professional recognition of a spiritual dimension in health.** The definition of spiritual health was discussed in chapter 2 (point 2.3.4.1), and the author will describe the spiritual dimension in health care from an Islamic point of view.

The Islamic way is in sharp contrast to the current trends of the modern world. According to Islam point of view, the Creator knows best, how the human psyche is formed, and the guidance of the Qur’an and *Sunnah* is in perfect harmony with human nature (Al-Khattab, 1997:1). Islam is known as *din al-fitrah* (the life-transaction of the natural state of man) (Al-Khattab, 1997:1). For centuries Muslim scholars and scientists developed an extensive and deep knowledge of human behavior and psychology, they developed Islamic concepts by which any person who is seeking strength of willpower, and

perfection may be guided. Instead of struggling alone, for no other reason than self-gratification, Islam channels an individual into seeking perfection for the sake of Allah, and teaches to seek his help in doing so. Thus, there are important Islamic ideals such as: *ubudiyah* (being a true slave of Allah), which enables a person to communicate with the highest Power in this universe, the Power of Allah, without a mediator; *tawakkul* (putting one's trust in Allah), concerning which the Prophet Muhammed (P.B.U.H.) advised, "Whoever wishes to be the strongest among men, let him put his complete trust in Allah;" and *sabr* (patience, forbearance, fortitude), which enables a man to face hardship (even during the time of severe illness or disability) with dignity and to accept times of ease without becoming arrogant (Al-Khattab, 1997:1-2). It is important to note that although the Arabic word *sabr* is translated as "patience," it has a far broader and deeper meaning than English. Depending on the context, it may mean fortitude, patience, equanimity, forbearance, patient endurance, etc. In addition to patience, an individual requires *shukr* which may be translated as "gratitude" or "thankfulness" (Al-Khattab, 1997:2). In the book *Patience and Gratitude*, towards understanding Islamic psychology and as a contribution of Islamic heritage (by Ibn Qayyim al-Jawziyyah [1292-1350 CE]; translated by Al-Khattab, 1997:3) clearly states that **Islam has answer to many of the psychological problems that trouble mankind today, such as anxiety, depression, lack of confidence, addiction, etc. In direct contrast to the Western focus on the "self," Islam tells an individual to look beyond himself and to focus on the Creator. By doing so, the person will move towards fulfilling the purpose for which he was created, and thus attain peace with the Creator and within himself (Al-Khattab, 1997:3). According to the Qur'an (Translation by Yusuf Ali, Intro. to Surah 10:478): "Men may wonder that a man like unto them should bring a Message from Allah, but Allah's Message shines forth through all nature and Creation. He guides the human spirit, if only Man will have Faith and put his hope in Allah. Wonderful are Allah's relations with man, yet man is ungrateful and runs to fancies and fanciful gods. Glory to the One True**

Allah, Who made Mankind as One, and holds alone The secrets of the unseen in His Great and good Universal Plan.”

In view of the above observation, **Islamic Medicine differs from modern medicine in that it addresses the question of the fourth aspect of the relation axes model, which is man and the transcendental.** In Islam there is a clear separation and distinction between the “spirit” and the “soul.” The spirit is what activates the physical level of existence, including the thought processes. The word for this spirit activator is *nafs*. It is activated at the point of the breath, the point between inspiration and expiration, be it from the nose or the mouth, where the link between life and death occurs. Thus, the *nafs* is the first aspect of our existence.

We can live without mental activity and without physical movement, but without breath, life ceases rather quickly. There are people who live without mental activity, which may be demonstrated by an electroencephalograph that shows that their brain waves are not functioning, but may be kept “alive” by mechanical means. The condition is referred to as “brain death,” yet the individual is still regarded as living and not dead. This signifies that there is something more essential than mental and physical existence. Such persons still have something left of life in them, and that something is the ability to breathe.

3.7.6.1 Man’s Spirit (*nafs*)

In Arabic, *nafs* is the word for the body and its appetites. *Nafs* means all the demands of the body for food, warmth, fame, and fortune (all these include emotional needs or drives). All physical diseases can be marked out by one or more of these physical dimensions.

The word *nafs* has many meanings: breath, animal life, spirit, self, person, essence, and more. The progression of the soul is described by considering the evolution of the *nafs*, which manifests in human behavior as one's entire character, personality, and behavior. The *nafsi am-mara* is the commanding spirit, which creates inordinate appetites. This is the condition of the *nafs* referred to when one occupies the station of egotism (*maqam an-nafs*). In the Arabic language, often daily expressions are used to describe a person who, for example, is helpful, friendly, cooperative or selfless; he is said to have a "good *nafs*" whereas a person who is greedy, selfish, uncooperative, demanding, jealous or envious is said to have a "bad *nafs*."

3.7.6.2 Mental and physical dimensions

The second aspect of our existence is the world of the mind, or rather the emotional and mental world. The mind is not entirely separate from the physical body, but is part of and intimately connected with physical functioning. Moods and feelings that originate in the mind frequently have an effect on the body, such as emotions of anger, fear, or extreme joy. When one or more of these is experienced, the blood pressure may rise or fall, the body may sweat, or the lachrymal glands become active by producing tears.

Interestingly, some ailments or conditions that we tend to regard as purely emotional actually have their origin in physical imbalances. An example is severe anger. Psychologists would usually attribute this to a condition of the mind or emotions. But according to the *Tibb* system of the Persian physician Avicenna, severe anger is one of the body's most effective ways of dispelling excess moisture in the area of the heart. It is easily corrected with diet (Moinuddin, 1985:13).

The realm of the mental world is called *fikr* in Arabic. In essence, *fikr* means meditation or the process deep-thought.

3.7.6.3 Soul

The third component of our existence is the soul, called the *ruh*. **The *ruh* is that which exists even after death, which marks the end of both physical and mental life.** The interaction of the three realms (the activation of the physical and mental realms by the soul realm) is carried out by means of the spirit.

3.7.6.4 *Idhn* (Permission from God)

The Muslims consider that the breadth of life exists and continues by virtue of the *idhn*, or permission of God, the One Who has created us all. What we call the Creator, Allah, God, or whatever else, does not matter. In His ultimate reality, God is one. He gives His permission for human life to exist in the first place, and as long as that permission remains, we may draw breath in and out. Regardless of which system of healing we may wish to apply, or how skilled the health care professional may be, even if all the healers of the world came together, they could not counteract the *idhn*. When the permission is withdrawn, there is no more breath, life ceases. **Despite the sophistication of modern technology, the *idhn* of God cannot be overlooked. According to Islam there is an Authority against Whom we have no real ability to interfere, and that authority is with Allah. A clear example is every individual has to face death one day or another.** No one knows when he will die or in which country he will die. This is one of the keys of the unknown, whose knowledge is only with Allah.

3.7.6.5 Heart and it's relation to the soul

The center, or seat, of the soul's existence is the heart. With what do we associate the heart and the soul? Love, compassion, sympathy, mercy, and all of our other sentiments. When someone dies, the grief of the survivors is felt in the heart. It is actually a physical pain. The heart aches. There are so many different terminology's in the Arabic language about these soul-related aspects of the heart. No one can deny that these feelings of love and compassion do exist. No one is without them.

In Arabic, the heart is called *qalb*. The heart according to Islam is not just a physiological pump for the circulation of blood throughout the body. It serves two more vital, interrelated functions. Firstly, the heart is the storehouse of divine attributes; and secondly, it is the seat of the *nafs* - that life activating force which enters with each breath, the breath that activates all physiological functions.

Thus, when the *idhn*, or permission of God, is drawn in, it goes immediately to the heart. In some manner, beyond the comprehension of the human, this *idhn* activates all of the divine attributes in various combinations, and these then are carried out in the body.

The Qur'an informs that these divine attributes are approximately ninety-nine in number and are what Allah uses as the means of allowing the human to function and work on the created plane of being.

For example, one of these attributes is called *al-Basir*, which means "the Perceiver." In other words, Allah sees everything at all times; there is nothing

that escapes the view of God, not even the most intimate thoughts. This *basir* exists as a potential in every human being and is stored in the heart. The expression of the potential for “perception” includes such things as insight, our sensation of majesty when viewing a beautiful sunset, and similar experiences. All of these perceptive capabilities are included within the potentiality of perception.

All of these ninety-nine divine attributes, then, are stored within the heart. These potentialities may be activated by means of various sounds we utter in combination to make words.

The three basic sounds are the long vowel sounds of *a*, *i*, and *u*. According to Islam, Allah has informed us, “Every creature in the Heavens and the earth glorifies His Name.” Thus, a pious Muslim, knowing the Arabic tones and names of God, is able to attune to a cosmic conversation that is constantly going on throughout all of existence as countless creatures utter their variations of the divine name.

The use of these three long vowels is not arbitrary. The long vowel sound of *a* (as in father), as a vibratory tone, travels downward and slightly to the left from the throat and centers in the heart, thereby stimulating all of the divine attributes stored within. The long sound of *i* moves in the opposite direction, up the nasal septum, and vibrates at the point of the pineal gland, which is considered to be a remnant of the third eye, a light-sensitive organ. The long sound of *u* exists when uttered exactly at the point on the pursed lips, the point of connection between the in- and out- breaths. It is where our action meets and intermingles with the divine permission, the *idhn*.

Pious Muslims use various formulas or combinations of these tones to produce electrifying effects that are able in and of themselves to unlock congested areas

within the heart, thereby releasing one or more potentialities. This alone accounts for a considerable number of miraculous cures. The author had an opportunity to meet and interview Sayyid Hashim Al-Refai in Kuwait, who is a descendant of the Prophet (Allah bless him and give him peace) (Keller, 1991:1112). He treats patients without charge in a way of prayers. His patient population comprises of patients' who are depressed, need to be close to God, encountering emotional and financial problems, people who have difficulty in finding a job, persons with elderly and terminally ill members of a family. An interesting aspect to note is that a pious Muslim will never charge money for treatment, because he is operating at a level above the material dimension.

3.7.6.6 Interconnection between physical and spiritual realm

The interconnection between the physical and spiritual realms exists throughout nature, of which humans are a part. One might say that animals are more attuned to it; sometimes horses and other animals give a particular sound just before they die, and nearby animals know the meaning of this sound. Animals seem to have a greater awareness of the unseen domains of life. Humans should have this knowledge, but they do not seek it. Humans are more bound to the physical plane.

There must be a knowledge and consideration of the physical, mental, and spiritual planes of existence for there to be true health. By understanding each of these planes of being, we can arrive at the correct modes of balancing and treating each one. If the subject of disease related to psychosomatic problems is looked into deeply enough, the origin of all illness can be said to lie in the mind (Moinuddin, 1985:16). There must be a thought or concept of an illness in order for it to exist. But what is the mind? Some say it is a collection of cells that has

many functions and possibilities. The pious Muslims attribute a great deal more to the mind, as the repository of the intellect, which God has given to humans, thus making them unique in all of creation. Before this mind can be adequately understood, we first have to have a conception of the entire universe, from the most minute bacterial life up to God. This is known as the hierarchy of creation.

There are several thousand Muslim physicians currently practicing in the United States and Canada. Not all have maintained active religious ties; however, among those who have, there are many who have constituted themselves into the Islamic Medical Association of North America (IMA). Like other professional associations, the IMA publishes a newsletter and a journal and holds conventions (Gallagher, 1988b:80-81). The IMA physicians offer Islamic critiques and remedies to the problems of contemporary medicine in North America. The president of the organization of the IMA Newsletter editorial, Nagamia (1985:1-2), stated: "American medicine is undergoing rapid changes ... the rapid development in technology has enabled medicine to advance at a phenomenal rate ... However, American medicine has developed a lot of failures. Most of these are related to the commercial exploitation of medicine ... American medicine has become a business and is no longer centered towards the individual physician who had at one time a 'one-to-one' patient-physician relationship ... Are there any answers?"

With the growing movement for the restoration of Islamic values, there is an increasing demand on Muslim scientists to restore and develop the Islamic sciences. "If Islamic medicine had maintained its dynamic energy, then there would be no contemporary need to recreate a tradition of Islamic medicine" (Gallagher, 1988b:80). Thus, it is essential, for Muslim scientists to have a clear and thorough understanding of the science he is expected to restore and develop. The majority of Muslim health professionals have no clear idea as to what Islamic medicine is. Even the ones who may have an idea may differ in their

concept and definition of Islamic medicine, as has been explained in chapter one (1.2.3.)

If this is the case, how could Islam, which expressly claims to look after man's interest in this world as well as in the hereafter, have neglected to initiate such a humanitarian contribution to all humankind? Could this be accountable to Islam or to the fortunate people who were born Muslim but who unfortunately did not share this knowledge? We require a comprehensive answer to the question: "What can I do to achieve the good life in this world and happiness in the life to come?" Often individual Muslims have not been able to answer this question and have departed from the spirit of its message; but the fact remains that to all who believed and believe in it, the Qur'an represents the ultimate manifestation of God's grace to man, the ultimate wisdom, and the ultimate beauty of expression, in short, the true Word of God (Asad, 1984:i-ii). **It is in reading and understanding the Qur'an, that a human being will be able to extract the medicinal values within the Qur'an.** This in the authors opinion, is the true essence of Islamic medicine. We need modern technology related to medicine, but we need to understand the limitation in modern medicine according to the teachings in the Holy Qur'an.

3.7.6.7 Islamic medicine - some interpretations of the Qur'an

Islamic medicine is surely difficult to define, as it encompasses so many facets of life. The concept of Islamic medicine surely appears fuzzy, lacks clarity and direction of purpose. The author will specifically address this concept in view of the **needs of an individual who presently encounter life threatening diseases for which there is no cure for the moment.** Allah says clearly in the Qur'an that: He is the All-knower of the unseen and seen

(S.64:V.18) and to Allah belongs the unseen (S.16:V.77). He also says: He is Free of all wants (S.35:V.15) and worthy of all praise (S.31:V.26). His Face will abide forever (S.55:V.27). All will perish except His Face (S.28:V.88) and that He is the Lord of the two East's and the two West's (S.55:V.17). When He decrees a matter, He says only, "Be! - and it is," (S.2:V.117; S.36:V.82; S.40:V.68). It is also interesting to note that He states: "He guides whom He pleases and sends astray whom He wills (S.24:V.46; S.14:V.4; S.16:V.37,93) and that He is able to do all things (S.2:V.109,284). Also no vision can grasp Him (S.6:V.103). He causes night and day to succeed each other (S.24:V.44), He rescues people from darkness and distresses (S.6:V.63,64), He provides without measure (S.24:V.38) and He burdens not a person beyond his scope (S.2:V.86; S.7:V.42; S.23:V.62). He is with those who are patient (S.8:V.46). He also stipulates that no bearer of burdens shall bear another's burden (S.35:V.18 and S.6:V.164). Everyone shall taste death, and on the Day of Resurrection each person shall be paid his wages in full (S.3:V.185). He also mentions that angels are responsible for the taking the souls of the dead (S.8:V.50) and that the dead will be raised again (S.6:V.36).

Any person who is ill and who is suffering from an incurable disease has the right to understand this knowledge which has great implications for the individual himself. It is also important to know why does a person become ill? And what is health?

3.7.6.8 Interpretation of health

3.7.6.8.1 What is health?

Since it is so difficult to define health because it means different things to different people, according to the Qur'an, God states: "For you God subjected all

that is in the heavens and on the earth, Behold! In that are signs for people who reflect” (S.45:V.13).

According to Moinuddin (1985: 11), when we ask a question regarding the nature of health, we need to address the human organism existing in a state of health; and in view of this, we need to understand several interrelated questions.

What is a human being? How did it come into existence? How is it sustained in existence? And what is the purpose of human life? Without understanding the answers to these questions, we can never have a satisfactory knowledge of the real type of health we should be seeking. For without any criteria for what constitutes the proper functioning of a human being, how can we say that it even matters whether we are ill or well? Just because something feels “good” does not necessarily mean it is of ultimate benefit to us. Conversely, if for the moment we seem to have pain, we cannot regard this as a “bad” experience unless we understand how and what the result of these momentary sensations will be.

According to Islam, Allah says in the Qur’an (S.2:V.216), “There may be a thing decreed for you that you do not like that is good for you; and things that you like that are not good for you.” The great Sufi Imam Al-Ghazzali (Moinuddin, 1985:11) expressed this idea as follows: **“Illness is one of the forms of experience by which humans arrive at a knowledge of God;** as He says, **“Illnesses are my servants which I attach to My chosen friends.”** Thus, we ought not necessarily to consider illness our enemy; rather, we may see it as an event, a mechanism of the body, that is serving to cleanse, purify, and balance us on the physical, emotional, mental, and spiritual planes (Moinuddin, 1985:11).

Health practices fall into three categories: (1) those for the body, (2) those for the mind or emotions, and (3) those for the soul. However, a person whose mind and soul are degenerated or weak may be unable to act upon or be acted upon by a purely spiritual practice. In such a case, both modern and herbal remedies may be used; food restrictions, such as dieting and fasting, may be prescribed; and other modes may be employed.

The practices for the soul are highly charged with divine grace and blessings, and if rightly applied, will never fail to bring results. It is a principle of nature that the spiritual always takes precedence over the material (Moinuddin, 1985:5-6).

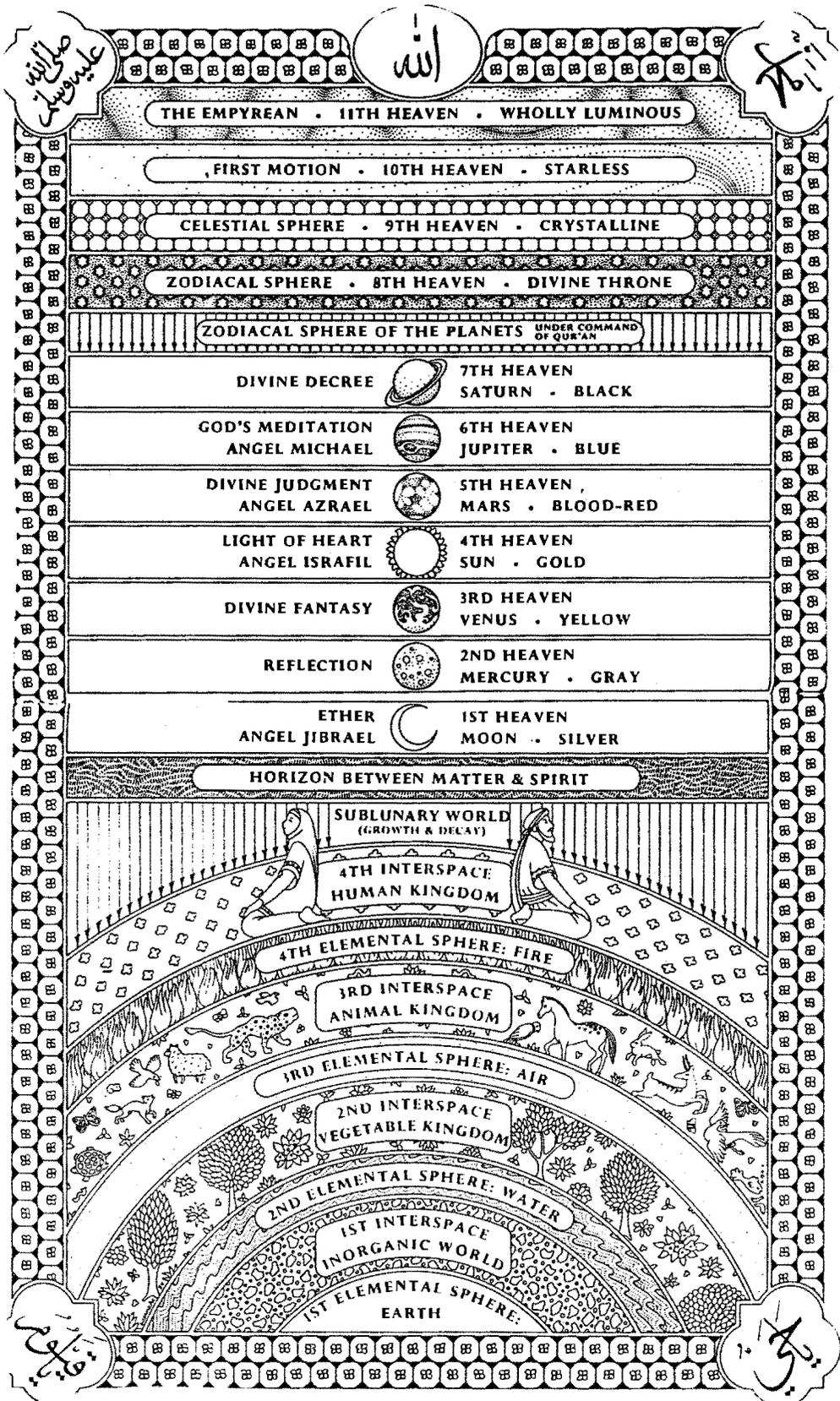
3.7.6.9 The Hierarchy of creation

According to the Qur'an (S.23:V.17): "God is the One Who created for you all that is on the earth. Moreover, He turned to the heaven and fashioned seven heavens with harmony. He is full of knowledge of all things."

The hierarchy of creation extends from the most minute forms of terrestrial life up to Allah. The construction of this hierarchy was designed by Allah and is kept in form and balance by His will. In general terms, the whole of creation is divided into two parts: the known world of our human creation (*insaan*) and the unseen (*ghayb*) and generally unknown world of the heavens.

With reference to the illustration in figure 3.25, Moinuddin's model of understanding the world - both seen and unseen (Moinuddin, 1985:19), the various realms of earth and the heavens can be represented in their entirety (Moinuddin, 1985:17-18). The known world is the sublunary (earthly) world,

FIGURE 3.24 MOINUDDIN'S MODEL OF UNDERSTANDING THE WORLD - BOTH SEEN AND UNSEEN (MOINUDDIN, 1985:19)



consisting of four elemental spheres, namely, the terrestrial, vegetative, animal, and human kingdoms. These four components are arranged in an ascending order of creation, so that human beings occupy the highest position in the order of the physical creation. This dimension is governed by the rules of nature, which is the domain of growth and decay, of life and death.

Above this created world of human existence lies the realm of the heavens, which are eleven in number. Each of these heavens is occupied by angelic forms and is populated with souls that depart from human bodies and earthly existence.

Each of the elemental spheres, that is, the terrestrial, vegetable, animal, and human kingdoms are composed of two parts: an elemental sphere and an interspace, with which it connects to the sphere above its own. Thus, the terrestrial sphere connects with the second elemental sphere via the inorganic world. When the element of water is combined with the territorial sphere, the vegetative world is created. And when all elements combine, that is, the earth, water, air and fire, the human form is created.

The human kingdom is the interconnection to the heavenly realms. For most humans, the first heaven is represented by the moon. We first attain our strivings for the heavenly realms by viewing the moon. For those who occupy the dimension of the first heaven, or moon, the moon is the firmament and the second heaven represents a higher aspiration - Mercury is their heaven, and so on, up the hierarchy of heavens.

Humans occupy the highest place in the realm of created life, by virtue of one reason only: Humans have been endowed with the faculty of reason (*aql*). Reason (*aql*) is the creative, rational reasoning power of the mind, which neither plants nor animals have. These lower forms can only obey their instincts provided by the Creator. They are totally obedient to the laws of nature.

Animals that have been domesticated usually lose the natural dignity of their species. Animals of all kinds are beautiful in their natural terrain. But in that element they have intact all of their natural instinctive behavior, which is required for their survival. The lion does not kill in the wild out of malice; he is a killer because he is by nature carnivorous.

Only humans have the capacity for creative reasoning, for the rational decision-making process by which we decide whether we are going to do a thing. This process is sometimes called free will. One can inform a human being that doing a certain dangerous thing will kill him; yet a human being, being able to exercise his free will, can act contrary to all the evidence and do it anyway. Animals have no such choice.

Our mental decisions are accomplished by reason (*aql*); and it is by virtue of this faculty alone that humans have been placed over all of the creation in the sublunary world.

Although Moinuddin (1985:19-21) attempts to describe the realms of the planets, the author would like to alert the reader that **humans do occupy the highest place in the realm of created life, but they have very little knowledge of the unknown related to the heavens.**

The heavens are inhabited by various beings of creation. They are disembodied souls (having died already to earth life and awaiting the *yawm al-qiyamah*, or Day of Judgement) in one or other of the heavens. All the angels exist in all of these various heavens, depending upon their function and rank.

In addition to human souls and angels, Allah also created *jinns*. Whereas He created humans from the four elements of earth, water, air, and fire, He made the

jinns from “smokeless fire.” The *jinns*, which are described fully in the Holy Qur’an, can from time to time assume human form. Generally, they are harmless or favorably inclined to humans, but they can be malevolent. They may have a great effect upon human affairs and frequently cause imbalances that we might identify as disease. A prime example is colic in infants, who are especially prone to the influence of *jinns*. Certain herbal substances and recitations are used to dispel *jinns* (Moinuddin, 1985:21).

3.7.7 CONCLUSION

This chapter is primarily concerned with health and illness in context with particular reference to Islamic view of medicine, more specifically Kuwait, and its implications for the system of training health care professionals. Introductory orientation is given to the State of Kuwait and the history of Kuwait to understand the impact of modern influence on the training of health care professionals. The relation-axes model introduced by Wielemans and Chan’s (1992:25) is used as a paradigm for understanding man in his interrelatedness.

In view of the discussion in this chapter, it is important to summarize that although it is difficult to understand the “concept of health” because it means different things to different people, Islamic teachings clearly states that **God has made available a treatment for every illness. This implies that every available and useful treatment known to us should be utilized and that if a treatment for certain illness is not yet known to us, it is our duty to search for it until we discover it. Thus, the very act of scientific research encompasses Islamic Medicine.** We are also reminded that Islamic Medicine is better considered a cultural force which absorbs many different currents within itself and having integratedly developed them.

In addition, there is a need for clarification of the relationship between the Qur'an and medical science. **The Qur'an is not a book on medicine or astronomy. The Qur'an is the book of substance.** The scope of the Qur'an's activity is man himself: his faith, feelings, works, and relation to his Creator and his environment. This has clear implications in trying to understand Wielemans & Chan's (1992:19) model for "understanding man in his rather complicated web of relations," especially the relation between man and the transcendental. **The Qur'an corrects and restores** validity and reliability to his conceptions and hypotheses about life and sets him on the true path, so that he may use his energies, including **his intellectual faculties, in scientific research within the bounds legally permitted to man.** Likewise, he treats the physical body of human society, which in turn allows him to best use **his energies with his God-given talents.**

The Holy Qur'an is a book of right guidance aiming at the formation of a Muslim society which will establish God's message of truth on earth. The *Sunna*, the body of legal precedents found in the sayings and doings of the Prophet Muhammad (P.B.U.H.) is considered to be an explanation and practical application of the Qur'an, which deals with the practical aspects of medicine and a general concern for the welfare of Muslim society.

CHAPTER FOUR

A COMPARISON OF THE ISLAMIC AND WESTERN VIEWS OF MEDICINE AGAINST THE BACKGROUND OF CONTEMPORARY ARAB SOCIETY AND SOME IMPLICATIONS FOR THE DEVELOPMENT OF AN APPROPRIATE SYSTEM OF TRAINING HEALTH CARE PROFESSIONALS IN KUWAIT

4.1 INTRODUCTION

Modern medicine has been able to convince society that it holds unique qualifications, exclusive competence and ability without doubt in matters concerning health and disease, be it any disease, disability, dysfunction, or disruption or revolution of an established order, be it organic, cultural or social. Modern medicine has managed to monopolize the management of a substantial number of such derangement's, gaining the economic and strategic support of the social system of which it is a part. Such a process has been criticized as medicalisation (Aries, 1980 and Illich, 1977 as quoted by Kottow, 1992:18), but a more exact analysis shows a generalized process that goes beyond a mere "giving over process," where medicine and society enter a mutual beneficial symbiosis [Chapter 2, (2.2.1)].

Modern medicine from its very inception has competed with the traditional healing functions of religious institutions as shown by the common derivations of words "heal" and "holy." To achieve its privileged and respected status, medicine had to show a convincing record of effectiveness in therapeutic intervention, usually gaining territory at the expense of religion and other social institutions. Thus, medicalisation seems to be a secular invasion of areas that traditionally had been managed in transcendental terms.

4.2 THE RELATION-AXES MODEL

4.2.1 Industrialization and “Industrial Mentality”

4.2.1.1 Modernization Theory

“The definition of Western technological-industrial influences is embodied in the concept of industrialization” (Wielemans and Chan, 1992:25). Industrialization is understood as an aspect of a more widespread process of modernization by which the dominant characteristics of the modern world are produced and realized. Introducing industry in a country means more than mere automation in industries where industrialization is being narrowed down to the externally perceptible results of a more profound process. This process can be interpreted as a change in mentality (“industrial mentality”) for each of the four mentioned relation-axes through the introduction of new knowledge, skills, attitudes, values and norms (Wielemans and Chan, 1992:25). It is presumed that these changes will inevitably affect the given meanings, the attitudes and behaviors of peoples and their indigenous cultures.

Modernization theory is characterized more by the questions it addresses and the social structures that it investigates than by distinctive propositions or conceptual methods [Chapter 2 (2.2.1.1)]. We are reminded that cumulative historical change in the mode of economic production has occurred in the Western World. This change, although beneficial, has unpredictable complications. Thus, it is important for us to reflect on the analytical description of accompanying changes in institutional forms, in sociocultural values, and in the social psychology of individuals and groups. We need to search the sociocultural, political, and economic landscape of the diverse developing societies to identify their critical

developmental processes and to determine whether they are repeating the history of the West or moving along novel paths.

Berger's concept of modernization theory provides a convenient account within which to focus a conception of health care. In Berger's view, modernization is a transformation of human consciousness that depends upon two processes - technological production and bureaucratization [Chapter 2 (2.2.1.1.1)]. When we reflecting on technology, we note that it too is a social product that can influence the culture and traditions of people. Bureaucracy too has an irreducible social root to it - an idea concerning right, equitable, efficient ways of regulating human relationships that arises within a particular cultural context.

Hence there is a close correlation between modernization and modern science, but it is important to realize that new knowledge or specialization in a developed world may be seen from a different "icon" to that of a developing world such as Kuwait.

4.2.1.1.1 Primary carriers of modernity

(a) Influence of technology

Technology indeed "creates new opportunities for people and societies, but it also generates new problems for them." It has both positive and negative effects, and it usually has the two at the same time [Chapter 3 (3.7.1.2)].

(a) I Positive aspects of technology

1. Diagnosis [chapter 2 (2.3.2.2)] as an essential aspect in modern medicine. There should be no treatment without a diagnosis.
2. Modern birth culture, where modern obstetrics achieved notable success in reducing both maternal and neonatal mortality and morbidity, in preserving the lives of premature infants, in diagnosing congenital abnormalities in utero, and in successfully treating infertility with in vitro fertilization (IVF) and other techniques [Chapter 2 (2.3.2.3)].
3. Advancement of medical technology in the area of knee arthroplasty (joint replacement) for the treatment of patients who have damaged knee joints [chapter 2 (2.2.1.1.1 a)].

(a) II Negative aspects of technology

1. Some areas of modern medicine, where there is a high rate of coronary bypass operations and other types of surgery, with the view of the body as a repairable “machine” and one that needs to be “repaired” and “overhauled” at regular intervals. The attitude to illness of some health care professionals as an “aggressive” and “can do” approach, part of the legacy of the frontier spirit [Chapter 2 (2.3.2.2)].
2. In the process of medical education, students undergo a form of “enculturation,” whereby gradually they acquire a perspective of ill-health that will last through their professional lives [Chapter 2 (2.3.2.2)].
3. Modern medicine has been criticized by many women for its over emphasis on the physiology, rather than the psychosocial aspects of pregnancy and birth. Its tendency to medicalize a normal biological event, turning it into a

medical problem, and thus converting the pregnant women into a passive and dependent "patient" [Chapter 2 (2.3.2.3)].

When reflecting on technology we are reminded that it will improve the processes of production and lead to new modes of organization of productive effort [Chapter 2 (2.2.1.1.1 a)]. In view of the situation in Kuwait, the author highlighted the example of many Western trained Orthopedic surgeons who are invited on a regular bases to perform knee arthroplasty on patients who have destroyed knee joints [Chapter 2 (2.2.1.1.1.a)]. Although surgeons may be asked to perform the surgery, he or she still has to overcome the technological constraint, in terms of the needs of the population. This would mean, that the answer is not just to import Western technology but to be able to establish ones own needs through specialization, cooperation, and coordination.

(a) **III Icon of modernity and its influence on health care professionals in Kuwait**

One of the icons of modernity and its influence on health care professionals can be illustrated by importation of new medical equipment in Kuwait, in the "magical" expectation that it will thereby improve medical care. Yet it may lie there in disuse, because no one has been trained in its operation or maintenance. The attitudes of the resident health care providers move along an emotional spectrum, from the excitement of acquisition, to eventual mild embarrassment over its nonuse and obsolescence. Such examples, are not exceptional in view of the fact that Kuwait is such a rich country. Also to mention "magical" expectations may be too biased as

sheer equipment can of itself be an energizing "icon of modernity." It may be a realistic expectation on the part of health care planners in Kuwait, to suppose that local health care professionals can perform with spirit and dedication, in the presence of such technological icons. However, performance with spirit and dedication requires motivation, and in an affluent society where the need for remuneration and recognition is not demonstrated through optimal performance, the attitude towards learning the new technology or "icon of modernity" is not prevalent. Thus, all of the **learning of new technology is dependent on the expatriate health care professionals, who are not permanent residents of the country.** Besides, these expatriates are constantly on the move due to renewal of their contracts. Thus, **Kuwait's health care planners are constantly at the brink of needing to recruit staff to operate such equipment even if it means training the people all over again.**

Islamic medicine and its attitude towards science and technology is positive, provided it is constructive, fruitful and gainful towards humanity and all living creatures on earth. Mankind's discoveries of new cures shall be made public. He shall not monopolize his new methods of healing for purposes of gain. As the Prophet Muhammad stated:- "No one monopolizes except a sinner" (El-Sayyad, 1981:59). Man through his knowledge, shall benefit any sick person whom he can help. As Prophet Muhammad said:- "O my God, I refrain from any science which does not bring benefit to people" and "Whosoever conceals knowledge from his people will be bridled with a bit of fire on judgment day" (El-Sayyad, 1981:59).

When reflecting on this problem, it is important for Kuwaiti health care professionals to demonstrate responsibility towards training of health care professionals. In doing so, they should actively participate in demonstrating the

need to learn the uses of different types of equipment so that there is no need for modern equipment to become obsolete.

(b) Influence of bureaucracy

Like the influence of technology, bureaucracy always has an irreducible social root to it, an idea concerning right, equitable, efficient ways of regulating human relationships that arises within a particular cultural context. Bureaucratic consciousness and bureaucratic institutions find their most refined expression in the political sphere of society. With respect to the situation in Kuwait, the bureaucracy available in various degrees at different situations has a negative influence in the country at large. A specific example, with reference to patient care is that the elite with the influence of "*Wasta*" have special concessions with regard to access to the best professional care even in the government sector. The author is aware of special areas reserved for very important people in some areas of the hospitals in Kuwait. The author during her interview with Dr. Al-Mahmoud (1996), was told that at times expatriates exercise bureaucracy against Kuwaitis. An example given was that Egyptian doctors only care for Egyptian patients and Indian doctors only care for Indian patients while Kuwaitis are kept waiting in the reception area. This surely demonstrates that **there is a lack of organizational system which should allow first come first serve**. It is observed that patients use their influence even through window outlets. It surely would be a generalization to say this method of receiving patients is applicable in every hospital and clinic, but to confess that it does occur in some places is true. Bureaucracy too has its own dynamic character, which consists of the refining of its categories for the classification of human actions, the status of persons, and the jurisdictional scope of its principles.

This is quite contrary to what Islam teaches with regard to duties of a health professional towards any human being who requires treatment. According to El-Sayyad (1981:57), the duties of the health care professional's conduct should include:-

- Consciousness of his role as an agent in the implementation of God's work of healing. Such is the attitude of service and worship to God.
- Directing his work to God until the patient has recovered.
- Giving the patient a spiritual uplift and moral courage whenever he is in a critical state psychologically.

The concept of human compassion according to Islam extends to all humanity, Muslims and non-Muslims, and it extends indeed to all living creatures. The Prophet Muhammad had said:- "You will have reward for mercy shown to every living being" (El-Sayyad, 1981:48). Again in the Prophet's (P.B.U.H.) words:- "You will not truly believe until you have become compassionate" (El-Sayyad, 1981:48). Companions of the Prophet had said: "O, Apostle of God, all of us are compassionate." Whereupon, the Prophet replied: "**Compassion is not for a man to show mercy only to his people. He must be compassionate to all mankind**" (El-Sayyad, 1981:48).

The health professional's position in the process of healing is to be an instrument of divine mercy and a vehicle by which God may relieve pains. When Abu Ramthah said to the Prophet: "Let me heal your illness," the Prophet replied:- "You are a friend, God is the Physician" (El-Sayyad, 1981:48). This saying emphasizes the position of the health professional in continuing contact with God, as he asks Him for success in his work. Thus, the aim of the health professional to relieve the pains of the sick is nobler than the desire for gain or earthly reward by virtue of his delight in the skills of his

profession. This does not mean that health care professionals are not expected to receive financial remuneration for their services. Islam does not accept that a Muslim should live financially dependent on others, as the tradition says: "The upper hand is better than the lower (The upper which bestows and the lower which begs)" (El-Sayyad, 1981:54). Islam honors professional work for the sake of legitimate gain. The Prophet Muhammad also said: "The finest nourishment a man eats is that earned by his own hand" (El-Sayyad, 1981:47).

From these observations, we can deduce that technology and bureaucracy are primary carriers of modernity, each of which in its independent fashion exerts a strong force in the formation of modern society.

4.2.1.1.2 Secondary carriers of modernity

(a) Mass education

Mass education is an essential feature of modern society and it is associated in various ways with the primary carriers being technology and bureaucracy. Its association with technology comes from the fact that it prepares individuals to participate in economic production. However, to varying degrees, contemporary mass education also provides a base of literacy and advancement in medical knowledge for health care professionals. Therefore, there is some overlap between the demands of technology and the goals of mass education, the latter is more than just "vocational." Further, the character and content of mass education show the historical markings of a given society (Gallagher, 1988b:63).

Mass education with specific reference to health care professionals in Kuwait has the prospect of individual upward mobility that tends to separate the intellectual elite from the mass. Irrespective of the nomenclature of the health care professional, most patients in Kuwait refer to them as doctors. This gives the health care professional the added mite for upward mobility [Chapter 2 (2.1.1.2 a)]. However, this is not applicable to all health care professionals, the case in point is seen in nursing as a profession. **Nursing in Kuwait is at times viewed as “socially degrading occupation”** as is explained in chapter 3 (3.7.5.4.4). This is again contrary to the horizons of **Islamic teaching which encompasses that all good practice should aim at the well-being of the human being**, in situations where no specific clear text applies, Islam then gives the Muslim health professional the possibility of acting in accordance with the benefit of humanity. There is a growing need for health professionals to be closer to God and increasingly committed to His revealed Word and the life and sayings of Prophet Muhammad (P.B.U.H.)

It is interesting to note that generally in its bureaucratic dimension, mass education prepares its recipients for membership affiliation and participation in social groups, particularly as citizens of the state. This is true for Kuwait only with regard to medical, dental, and pharmacological associations but the author is aware of the vary many problems encountered in the formation of for example, a physical therapy association. However, the latter is still to be pursued on the grounds that there are approximately 190 qualified physical therapists from Kuwait university and a total of approximately 300 practicing in the country.

4.2.2 Acculturation, culture, cultural identity and core values

Modernity also has a major impact upon the ways in which individuals perceive themselves and others. It promotes the awareness of oneself as a person who, whatever one's social identities, memberships, and allegiances, is not exhaustively defined by these categories. The traditional definers of social identity which encompasses age, sex, and marital status becomes more variable, less forceful, and less embracing. The modern **"health care individual"** has an inner biological uniqueness, the conception of which is a remarkable consequence of contemporary bioscience. The individual has also an external functional style or "personality" that marks him or her as different from other individuals.

With reference to chapter 2 (2.2.2.1) where acculturation was said to take place when the culture of an individual or groups is modified as it comes into contact with another culture, this has important implications with regard to value systems. In the West, the value system of universal human rights, which is the moral and legal locus of claims to health care and corporal integrity, has displaced earlier, more pernicious systems of status honor and communal protection for socially categorized persons. At the same time, when reflecting on the modern complex societies, the modern health care system will not allow a dedicated health care professional to assist a patient in need (for example, at a site of a motor car accident), due to the litigation rules and regulations.

Many patients in Kuwait prefer to receive treatment abroad rather than in their own country. They are able to do so because they have the finances. Besides not all of them receive the treatment expectations they envisaged and some return to Kuwait to continue their treatment locally. The author has encountered many such patients in Kuwait.

It is important to address the question of social justice in health care governing the rights of health care professionals and the rights of patients. **What has happened to the recognition and respect for the health care professional and why is the patient beginning to lose confidence in the health care professional?** It is clear from the above discussion that **there is a role for Islamic medical education at the tertiary level, especially as regards health care delivery and the training of the health care professionals.** However, this role has been neglected. The introduction of industrialization and the penetration of the “**industrial mentality**” as described by Wielemans & Chan (1992:30-31) is seen to influence not only the cultural equilibrium in Kuwait, but also the view of man, society and man’s role in nature and in the cosmos. These new relations will surely change the socialization processes and the quality of cultural transfer especially through the socializing agents of the family and the school. Growing up within any society is a form of enculturation, whereby the individual slowly acquires the cultural “lens” of that society. Without such a shared perception of the world, both the cohesion and the continuity of any human group would be impossible.

4.2.2.1 Core values

Core values have been described as one of the fundamental components of a group’s culture [chapter 2 (2.2.2.4)]. Wielemans (1993:7 as quoted by Badenhorst & Claassen, 1995:7-8) states that, **in the Western world, the emphasis in education is on the development of the I, on individual achievement and on personal motivation.** From an early age individuals are taught to compare their achievements with those of others and their feeling of personal worth is determined by their position on a continuously updated list (Wielemans,

1993:7 as quoted by Badenhorst & Claassen, 1995:7-8). Similarly, Wheatley (1992:30) laments the individualism of American culture which “leaves the individual suspended in glorious, but terrifying, isolation.” **“Western man led the way in establishing order in a chaotic world”** (Badenhorst & Claassen, 1995:10), but Schuck (1987:6) states that **“perfect order is not found in the natural world nor is it part of human nature.”** Badenhorst and Claassen (1995:10-11) explain how Western man has lost sight of the fact that order can be accomplished by the process of self-organization which is possible when a complex structure, a person or an organization, is free to interact with its environment. This “freedom is therefore not a concession to be made, but a condition for sustained renewal and transformation” (Badenhorst and Claassen, 1995:11). In the author’s opinion even within this freedom, **man needs to reflect on the fundamentals of the ideological system which has identifying values which may offer meaning in life.** In this study, the **Islamic values are considered the ideological system** which a Muslim is expected to reflect upon before exercising his freedom of choice. Since freedom may be interpreted to mean different things to different people, an example is, freedom to choose to become homosexual or lesbian may be regarded as acceptable by some people, but this behavior is not encouraged in Islam.

4.2.2.1.1 Core values in Islamic medicine

Islam aims to create the Muslim personality right from infancy, since Islamic character is part and parcel of the individual and his nature. It is the duty of the family, school and state to provide the suitable environment in which moral corruption is not the order of the day and where the ideal followed is the word of God Most High. Thus, in this manner, the younger generation

may grow up smoothly, with a disposition instinctively pure without contradiction. He finds before him the path of goodness easy. Hence the word of God Most High becomes a human reality.

One would think that it does not matter if the health care professional is a Muslim, Christian, atheist or Hindu, if all you need is an antibiotic for a chest infection. However, it matters a great deal more if the health care professional is persuading you to have an abortion, divorce your difficult spouse, or accept cells from an aborted baby for Parkinson's disease and **"the list of ethically unacceptable treatments grows monthly"** (Home, 1996:39). **The Muslim health care professional is the one who should shoulder the trusteeship of Islam first and foremost and keep the trust of safeguarding the good health of all individuals and of warding off all harmful diseases even those related to psychosomatic social ills.** For him in particular, it is most appropriate that his upbringing and education be Islamic. Thus, the values entrusted to the health care professional should apply in his daily life. What really matters is whether the health care professional believes, and whether that belief influences his practice of medicine. All health care professionals vow to treat their patients irrespective of race, creed or color. His perception of all living creatures will be through the eyes of compassion. It is, therefore, most appropriate that he should be compassionate towards man, the most excellent of God's creation, whom God has honored and made his representative on earth. **What is important is whether the health care professional is knowledgeable in the core values of a specific group in which he is extending his professional service.** These core values should be seen through the **"cultural lens"** where the system of shared ideas, beliefs, behaviors, perceptions, emotions, language, religion and family structure are expressed in the ways that humans live. According to Smolicz (1981:75) **"core values can be regarded as forming one of the most fundamental components of a group's culture. They**

generally represent the heartland of the ideological system and act as identifying values which are symbolic of the group and its membership. Rejection of core values carries with it the threat of exclusion from the group... **it is through core values that social groups can be identified as distinctive ethnic, religious, scientific or other cultural communities.** Without this "cultural lens" it is difficult to transmit these guidelines to the next generation who may encounter unpredictable complications.

4.2.3 Educational socialization and core curriculum

"Modern or industrial countries are those which have the technology and the "know how" to convert raw materials into consumer goods. Developing or underdeveloped countries are those which use these products, although, at times the raw materials used in the fabrication of these products come from these consumer countries" (Dodge, 1983:1). However, in reality, such a relationship is not limited to consuming products. It also applies to using the West's educational system, literature, philosophy, medicine, thoughts, and ultimately its way of "day to day" living. **This means that, by accepting Western science and technology, one would eventually inherit its educational system and culture.** In other words one would eventually acquire the "cultural lens" of the Western educational system in terms of their core values related to the delivery of health care.

According to Dodge (1983:1), **"Science and technology, the strong agents of Western influence over developing countries, although beneficial to these developing countries, are also seen as a means of exploitation, and as a force used to distort and destroy the structural elements of their society,**

which means their traditions, cultural values, educational system and religion."

It is without doubt, that when a nation changes its dress code, its way of thinking, its surroundings, its educational system, its living conditions, and his city, he becomes a transformed man. This transformation may be regarded by some as "modernization" or rather keeping abreast of new developments. From the description of the term modernization in chapter one (1.2.1), it would seem that a new culture called "modernization" has been and will be presented to the whole world. This would suggest that all people of the world should become uniformly alike, they should live alike and think alike. This will most definitely affect the structural elements of the personality and the spirit of a man and his nation, which include his religion, history, culture, ancestry, education and tradition. It is important to consider to what extent is the concept of "modernization" having an influence on the developing countries such as Kuwait? How may this be recognized as a threat and challenge to the traditions of the society and its educational institutions in Kuwait?

4.2.3.1 Tension in Kuwait society

(a) Need for Arabisation of medical education

In Chapter 3 (3.7.5.4.6), reference was made about a three-day conference which was held on Arabisation of Medical Education. During this conference, concern was expressed that Arabic language is capable of absorbing all science, including medical sciences, and that previous Arab and Islamic medical researches and publications were translated to English and French. It

was also felt that the opposition to the Arabisation of medical sciences was less than before, after its pros were proven to be greater than its cons.

The author during her interview with prominent academics in Kuwait, addressed the following question: What is your opinion regarding Arabisation of medical education? Would you consider this a step forward or a step backward for Kuwait in terms of the many challenges facing health care professionals?

The Rector of Kuwait University, Prof. Al-Kharafi clearly stated that Arabisation of medical education was not possible for the moment because of many reasons, some of which include the deficiency in scientific reference books in Arabic for consultation by students; and the difficulty in recruiting competent qualified staff for training health care professionals. She voiced her respect for the wishes of Kuwaiti people but felt that **much research needs to be pursued before implementing Arabisation of medical education.** She expressed her concern that **all World conferences and symposiums are held in English**, so it is particularly important that Kuwaiti Nationals have a very good bilingual schooling with great emphasis on the English as a second language, which should be equally strong.

Dr. Al-Bader, the dean of the Faculty of Medicine, reiterated that most famous Arab scholars have come from tertiary education where English was the medium of instruction. He expressed concern that Arabisation of medical education, was a step backward instead of a step forward, when focusing on the spectrum of modern medical education in the world. He elaborated on this point, by stating that most external examiners in Kuwait, are from the United States who evaluate the students level of competency. With Arabisation, this would mean identifying external examiners from neighboring Arab States who's standards may not fulfill the required international standards of

competency. He specifically quoted an example of the subject Psychiatry, which was taught in Arabic before the invasion and how this had caused many problems. After the invasion, they decided to modernize Psychiatry by allowing it to be taught in English. This made it possible to invite external examiners from the United States to evaluate the competency level in Psychiatry.

Dr. Al-Mahmoud, dean of the Faculty of Allied Health Sciences and Nursing, voiced concern about the need to keep abreast of advancement in knowledge and science but at the same time there was a need for their own Arabic language proficiency. He expressed affinity for the Arabic language, especially in poetry. He expressed concern that Arab health care professionals were losing the command of the Arabic language, by not being able to take a comprehensive history of a patient in the Arabic language.

From the discussion above, it is clear that there is conflict of opinion with regard to Arabisation of medical education. In the author's opinion, most students who are registered in the Faculty of Allied Health Sciences and Nursing have a stronger background in Arabic than in English. This makes it difficult for students to understand information, especially scientific information which is taught in English. It is also important to establish if there are qualified, competent health care professionals of Arab origin who can teach the required material in Arabic. From these observations it is clear that additional research will need to be pursued, before implementing Arabisation of medical education.

(b) Need to introduce segregation bill

With reference to the article "Panel approves 'segregation' bill" (Arab Times, Wednesday, Nov. 17, 1993:3), the Kuwait educational committee at the National Assembly **approved a draft bill to segregate male and female students at various faculties of Kuwait University.** In this draft bill, they called on officials at the Ministry of Higher Education and Kuwait University to exert every effort to achieve this aim. **Such a draft bill surely demonstrates a threat and challenge to the traditions of the society and its educational institutions.**

At Kuwait University, co-education applies in all colleges except two. One is the religious studies college and the other is the college for girls in Keifan. The Kuwait parliament on Tuesday, 28th May 1996, passed a controversial bill to end co-education at the Kuwait University and foreign schools within five years. The bill was passed unopposed by Cabinet ministers and liberals abstained (Arab Times, Wednesday, May 29, 1996:1). To become law, the bill has to be endorsed by the Cabinet and signed by H.H. the Amir. The bill asks the government to begin immediately, but gradually, the process of segregation at the Kuwait University, foreign private schools and institutes of the Public Authority for Applied Education and Training.

The government said that the implementation of the bill is not possible because it will incur huge costs and massive rearrangements. If the Cabinet refuses to endorse the bill, and the Amir consequently does not sign it, the Assembly would require a two-thirds majority, or 41 members, to overrule the government rejection. If it does so, the government will be compelled to implement the law. The National Assembly in Kuwait voted 40-1 on Tuesday, 2nd July, for the new bill on gender segregation at the Kuwait University (KU) and the Public Authority for Applied Education and Training (PAAET)

(Arab Times, Wednesday, 3 July 1996:1). The lone dissenter was liberal member of parliament (MP) Abdullah Al Naibari. Two MPs abstained from voting. The new bill aims at attaining the most ideal legislative status for **implementing segregation** within a period not exceeding five years from the date of issue of the bill. It specifies that **KU and PAAET must begin phasing in steps to segregate the sexes and complete the process within five years.** Few details are given about how this is to be achieved, except that all measures should be in line with Islamic law.

The author during her interviews addressed a question regarding segregation of sexes at Kuwait University, whether this was feasible or not? All those involved in higher education, strongly felt that it would be **extremely difficult to implement segregation of sexes at the Faculty of Health Sciences because it is not cost effective at all.**

Prof. Al-Kharafi commented, that maybe a separate university for females could be pursued in the near future.

Dr. Al-Bader voiced his concern that at tertiary level, a male health care professional should not look at a female as a sex object, in fact she should be respected as an individual. He reiterated that a female does have a role to play as a mother, but this does not mean that she cannot aspire for higher ideals to fulfill her ambitions.

Most raised concern that one cannot expect such a bill to be implemented without proper research and planning.

4.2.3.2 Islamic medical view on the management of patients by health care professionals of the opposite sex

The treatment by members of the opposite sex, who are not close relations, has been addressed by As-Suyuti in his book the *Medicine of the Prophet* (As-Suyuti, 1994:135-136) where he states that:- “it is clearly *halal* for a man to treat a women to whom he is not related, and to see her private parts in cases of illness. And similarly it is *halal* for a women to treat a man, and to see his private parts in a case of illness, and if there is no man or women from his family at hand.”

The treatment by members of the opposite sex is also addressed in relation to a deceased individual. Islam has clear guidelines with regard to ablution of a deceased body where males are responsible for the male body and females are responsible for the female body. However, As-Suyuti (1994:136) goes on to explain that “if a man dies among women, or a women dies among men, the women are permitted to wash the dead body of the man, and the men that of the woman.” According to Doi (1984:52) “The Messenger of Allah may benediction and salutations of Allah be on him, said: ‘Acquisition of knowledge is compulsory for Muslim men and women.’” According to the Prophet Muhammad (P.B.U.H.): “Acquire knowledge. It enables its possessor to distinguish right from wrong, it lightens the way to heaven, it is our friend in the desert, our society in solitude, our companion when friendless, it guides us to happiness, it sustains us in misery, it is an ornament amongst friends, an armor against enemies.” It is the thirst for education which is highly emphasized in Islam, both for males and females. However, this concept of education has been interpreted wrongly by some Muslims.

What health care professionals need is to understand how to incorporate modern medicine into an Islamic system of education without seeing it as a threat or a challenge to the traditions and the culture of the environment. Thus, when reflecting on the operation of core curriculum in the training of health care professionals, it is important not to just incorporate the **qualification objectives** related to cognitive and psychomotor aspects of learning but to incorporate the **identification objectives** which include the values, norms and attitudes and the **social functions of education** which include the social needs and national goals of the nation. The qualification objectives, identification objectives and social functions can be operationalized in the core curriculum through reflecting on the relation-axes with respect to man and nature, man and fellowmen, man and himself and man and the transcendental as was described in Chapter 2 (2.2.3).

TABLE 4.1 COMPARISON OF ISLAMIC AND MODERN MEDICINE ACCORDING TO THE RELATION-AXES MODEL

RELATION AXES	ISLAMIC MEDICINE	MODERN MEDICINE	RELATED TO WHICH OBJECTIVES / SOCIAL FUNCTIONS
MAN AND HIMSELF			
Source of Technology	Important if it brings benefit to mankind	Importance is focused on "economic rationality" rather than "health rationality."	Qualification objectives
Nature of bureaucracy	Is discouraged. Health care professional has a duty to any human being who may require treatment, irrespective of creed, color, religion or status.	Classifies humans according to their status. Elite enjoy special concessions with regard to best professional care.	Identification objectives
Attitude to Mass education	Acquiring knowledge enables its possessor	A goal in itself. Impetus for upward	Qualification objectives

	to distinguish between right and wrong.	mobility.	
Attitude to medical knowledge	Education should include all aspects: scientific, intellectual, imaginative, physical, linguistic, and spiritual.	Reason and experimental method.	Qualification objectives
MAN AND NATURE			
Attitude to modern science	Need to exercise intuition, synthesis and integration where we have cyclic, holistic and qualitative ecological consciousness with a religious dimension.	Everything can be observed, rationally understood, explained and therefore predicted and mastered. This the linear, analytical and quantifiable reductionistic way of thinking.	Identification objectives
Definition of health and illness	Balanced relationship between physical and psychological aspects of life.	WHO - State of complete physical, mental and social well-being and not merely the absence of disease or infirmity.	Qualification objectives
Perception of pain.	Direct link between physical pain and social, moral, and religious aspects of life.	Voluntary reactions to pain are particularly influenced by social and cultural factors.	Social functions
Attitude to disease and diagnosis.	Patient's personality, religious belief, and socio-economic status of the patient are often considered relevant in making a diagnosis.	Emphasis is upon numerical objective measurements. "Mind-body dualism." Scientific rationality. View of "diseases" as entities.	Qualification objectives and Social functions
Attitude to modern birth culture	Need to address the psychosocial aspects of pregnancy and it's religious connotation.	"Mind-body dualism." Emphasis on technology as being supreme.	Social functions
Culture related to contraception, abortion and infanticide.	The Divine Law is specific with reference to these observations.	Debatable on abortion - whether women is entitled to the control over her own body and fertility, and also whether the fetus is regarded as a 'person,' with the	Social functions

		same rights and privileges as other members of the society or is seen merely as an organ or collection of cells.	
Focus on cultural values	Community of believers	Individual fulfillment. "Paradigm shift," - ideas and values of past need radical revision.	Identification objectives
Nature of medical system	Every human being should have access to health care	Access to health care is measured by "economic rationality," for those who can afford it.	Social functions
MAN AND FELLOWMEN			
Attitude to man	God's earthly representative	Need for individual autonomy, self-achievement and self-determination.	Identification objectives
Popular Sector	Utilized but is related to culture. Emphasis is on an extended family and community.	Utilized with emphasis on group classification, e.g. one-parent family and social isolation (friends by post). Nostalgia for "caring community."	Social functions
Folk Sector	Spiritual healers	Skepticism	Social functions.
Professional Sector	Acquisition of knowledge is encouraged - it differentiates man of knowledge with man who are ignorant.	Based on modern scientific medicine which has positive contributed to mankind with some limitations discussed in this thesis.	Qualification objectives
MAN AND THE TRANSCENDENTAL			
Attitude to spiritual health.	Related to Divine knowledge. Faith in and recognition of the power of God is above all.	Neglected. "Mind-body dualism" Resurgence of interest in the spiritual dimension.	Social functions.

4.2.4 COMPARISON OF ISLAMIC AND WESTERN VIEWS WITH REFERENCE TO THE RELATION-AXES MODEL

4.2.4.1 MAN AND HIMSELF

When comparing Western system of secularism with that of Islam, it is important to understand that **Islam cannot recognize any division of life into sacred and profane spheres and that all values in Islam emanate from the teachings of the Qur'an and the Prophet Muhammad.** The concept of secularism cannot be perceived without the incorporation of these values. The fact that the bearer of this sacred trust in the Muslim community as a whole and where there is no priesthood that mediates between man and God further facilitates this original stance. It is true that since the twenties of this century, Turkey has officially gone secular, but no other Muslim country has followed this example and in Turkey itself important changes are in preparation, and we can probably expect the official Turkish secularist stance to change within few years. It is true that the secularizing trends have influenced Muslim societies in various ways since the impact of the West upon them, and the modern medical profession in these societies has had a fare share of it, nevertheless these societies are still in transition and the current resurgence of Islam is primarily a reaction to this penetrating secularism (Rahman, 1982:77).

4.2.4.1.1 The controversy between modern medicine and Islamic medicine

There is universal controversy between modern medicine and traditional or (Islamic) medicine, however, in some cases a certain integration has been achieved (Unschuld, 1976. as quoted by Aakster, 1986:269). For the purpose of looking at some of the reasons for this conflict of ideas, we can distinguish between pharmaceutical, integration and holistic models. These will be briefly discussed.

(a) The Pharmaceutical Model

The pharmaceutical model corresponds to what is commonly termed the modern medical model. There are actually two main options that exist within the modern conventional model, the one being the pharmaceutical model and the other being the integration model. Griffin (1975 as quoted by Aakster, 1986:269) analyzed the relationships between the pharmaceutical industry and medical education in the United States, it seems appropriate to prefer the term pharmaceutical model. The Rockefeller Foundation and through it the pharmaceutical industry, with other industrial interest groups have attempted since about 1900 to influence medical education, by supporting financially the better institutions. This slowly led to an effective improvement in these institutions. With the result, these educational systems also came to rest heavily upon pharmacology- and research departments. On the other hand, universities that emphasized the role of dietary needs, social and mental aspects, were not supported and many failed to survive. There was a considerable influence of the pharmaceutical industry upon the staffing of the American Medical Association, and on the leading medical journals (Griffin, 1975 as quoted by Aakster, 1986:269).

If the assumptions above are correct, it is essential to understand the characteristic features of the pharmaceutical model which for this study will fall under modern medicine. The modern science based medicine concentrates on disease as a demonstrable deviation of function and/or structure in organs, tissues or cells. **Illness is usually indicated by a characteristic pattern of symptoms and complaints that should be carefully (= objectively) measured and classified (the diagnosis).** The cause of disease are mostly of an infection, bacteria or viral like nature. In therapy the emphasis lies upon removing or suppressing the observable signs of the disturbance, preferably by chemically and scientifically developed medicines, or through surgery, or by radiation. Thus, the application of technology, both diagnostically and therapeutically is dominant (Aakster, 1986:269).

The World Health Organization (WHO) warns of the global disease crisis in its annual report (Arab Times, Monday, May 20, 1996:1 and 8) which states that:

- There are 30 new infectious diseases that have emerged in the last 20 years, including AIDS and the Ebola virus, first identified in Zaire in 1976.
- **The infectious diseases are the leading cause of premature death and are increasingly resistant to antibiotic drugs.**
- Until recently, antibiotics were regarded as the solution to many infectious diseases. Today they were becoming less and less effective as resistance to them spreads.
- As resistance to antibiotics has “worsened dramatically” over the last decade, so has the pace of developing new drugs has slowed, according to the 137 - page report.
- There is strong evidence that a major cause of the current crisis in antimicrobial resistance is the uncontrolled and **inappropriate use of antibiotic drugs, in both industrialized and developing countries.**

- These drugs are used by too many people to treat the wrong kind of infection, in the wrong dosage and for the wrong period of time.
- **Drugs that cost tens of millions of dollars to produce and take perhaps 10 years to reach the market have only a “limited life span in which they are effective.”**
- Ralph Henderson, WHO’s assistant director-general, told the news conference: “It’s like the globe was a piece of cake and we’ve iced it with a thick layer of antibiotics.”
- **The heaviest burden of ill-health will continue to fall on people in the developing countries.**
- In many developing countries, antibiotics can be bought on the open market, while some are **counterfeit**.
- To make the global situation worse, tuberculosis has formed a lethal partnership with HIV.
- About 20 million adults are currently infected with HIV and more than 4.5 million of them have developed AIDS since the pandemic began in the late 1970s, according to the report AIDS killed about one million people worldwide in 1995.
- Among adults, **AIDS has become the first cause of death in urban areas of the United States, sub-Saharan Africa and parts of Europe.**

When reflecting on the WHO annual report of global diseases, it is important to note that although modern medicine has become sophisticated, it has at the same time, many short comings. Thus, it is important to address how to overcome these problems.

(b) The Integration Model

The integration model was introduced into modern medicine when physicians sought to reintegrate the fragmented body. Under the influence of the mental health movement, psychosomatic medicine, family medicine, public health and medical sociology, it became realized that **the human being is more than a composition of cells, that illness also has psychic and social aspects and consequences, and that poverty, overcrowdedness and unemployment may have a severe influence on the spread of disease and death rates of populations.**

Essential features of this model are that the human being is considered as the integrated whole of the social, physical and mental aspect, and that the inter-relationships among these aspects should be studied. There are some instances where illnesses may be of a purely morphological nature and another of a functional nature. The signs and symptoms should be interpreted as signals of serious, emotional or relational or social problems. It is advocated that in a situation such as this, a combination of therapeutic measures should be applied, or at least be advocated (Aakster, 1986:269).

As human beings are more than a composition of cells, and where illness has both the psychic and social aspects, there is a **need to integrate modern and traditional (Islamic) approaches to health care, so as to allow a combination of therapeutic options available for the patient to receive the best care possible.** In addition it would be interesting to compare modern family medicine with Islamic medicine because it is in modern family medicine, that attention is drawn to the person as a whole and as part of a family and a society.

(c) The Holistic Model

The holistic model conceptualizes the human being as a total whole, oscillating internally as well as externally within the boundaries of a continuous dynamic equilibrium. McKee (1988:775) explains the contrasting view of the body and illness provided by the holistic model can help to demonstrate how Western medicine reflects the capitalist system in which it is promoted. He shows how evaluation of holistic therapies is problematic insofar as it is based on the analytical, reductionist criteria of the Western model. He suggests that one reason why holistic practices are not fully accepted by Western medicine may be the challenge they pose to the Western model, and to the commodification of health needs promoted by this model (McKee, 1988:775). The holistic model incorporates in addition to the three aspects of the integration model, a fourth dimension, which is the existential. According to Stanway (1982:34) many of the parameters involved in holistic therapy, such as intuition and psychic forces, are unmeasurable and their control and replication is not possible. This is a time-dimension, it relates the human being to its past and future, it emphasizes the goal-striving behavior, the realization of the self over time. Another difference between integration and holistic model is that the latter does not distinguish between soma, psyche and social. The diagnosis is a total diagnosis, not just a description of symptoms. The therapy is a total-therapy in which the life-forces are strengthened instead of fighting the disease as such. A natural way of living and natural environmental conditions are emphasized. The patient is approached as a responsible and assertive individual (Capra, 1982. as quoted from Aakster, 1986:269; and Relman, 1979:312-313).

It is important to understand that the period of modern medicine is as old as a century or so. This cannot be considered a long period of time, when

reflecting that not very long ago, **medicine did incorporate holistic model of health care, where there was no division between the mind and the body.** Slowly this approach changed with the increased emphasis on objective measurement that is elaborated in [Chapter 2 (2.3.2.2)]. However, there is a resurgence in the interest to incorporate holistic medicine with modern medicine.

4.2.4.1.2 The Islamic Medical Model

According to Islamic medicine, the performance of any medicine be it traditional or modern will be evaluated according to its ability to save life, to eradicate or control disease, and to improve personal well-being. The relation of Islam to medicine is a lesser component springing from the greater truth which governs Islam's view of man. For man in the Holy Qur'an is God's representative on earth. He is the creature honored by God who commanded the angels to bow down to him. He has appointed the earth for him to build upon and to cultivate. This paramount value assigned to man has entailed the raising of an array of guarantees which Qura'nic verses and traditions of the Prophet have confirmed to such an extent that any hostility to man is aggression against society as a whole. The Qur'an states: "If any slew a person - unless it be for murder or for spreading mischief in the land - it would be as if he slew the whole people" (Qur'an, S 5: V 35).

Halstead (1986:17) has illustrated in a form of a table a contrast between the principles of Islamic Education and Western Secular Education (as perceived by Muslims) [Table 4.2 (253)].

TABLE 4.2 CONTRAST BETWEEN THE PRINCIPLES OF ISLAMIC EDUCATION AND WESTERN SECULAR EDUCATION

PRINCIPLES	ISLAMIC MODEL	SECULAR MODEL
Aim of education	The good man	The rational man
Highest personal values	Spiritual wisdom	Material well-being, happiness
Nature of morality	Divine law	Relativism or subjectivism
Focus of values	Community of believers	Individual fulfillment
Nature of reality	Unity (of God, humanity, religion and knowledge)	Diversity and pluralism
Attitude to man	God's earthly vice-gerent	A self-sufficient being
Attitude to knowledge	A form of worship	A goal in itself
Source of knowledge	Revelation	Reason, the experimental method
Foundation of belief	Authority	Rational autonomy
Attitude to belief	Certainty	Doubt, critical openness
Approach to religion	Commitment, faith	Skepticism
Valued state of mind	Submission, reverence	Pride, ambition
View of multiculturalism	Moral chaos	Healthy pluralism

Table :A Contrast between the Principles of Islamic Education and Western Secular Education
(as perceived by Muslims)

* (Halstead, 1986:17, table two)

According to the Qur'an, **Man occupies a unique position in the scale of being in the entire universe.** However, **man** seems incapable of handling the responsibilities, abuses them and particularly abuses the power generated by them. This theme is persistent through the Qur'an and is attributed to his **unmagnanimousness and narrow vision that renders him selfish.** It is for this

reason that it is obligatory for every Muslim to **seek nearness to God** with whatever means possible by way of service to Him and that he tries his utmost to carry out Allah's commands and ordinances.

When reflecting on this model it is important to understand that according to Islamic model, the aspect of "aim of education" which states "the good man" should read "the man who exercises reason and logic." According to the Qur'an, which is the Divine knowledge from Allah, states that Prophet Muhammad (P.B.U.H.) "is the Messenger of Allah, And the Seal of the Prophets: And Allah has full knowledge of all things" (Qur'an, S.33:V.40), clearly indicates that the future will depend on people who are able to exercise reason and logic.

The Islamic model does not view multiculturalism as "moral chaos" but it is able to absorb multiculturalism. The Qur'an, the Divine revelation from Allah, states: "it is a book of Wisdom" (S.10:V.1; S.31:V.2; S.36:V.2); "**there is purpose of revelation**" (S.16:V.64-65); "**it has healing and mercy**" (S.17:V.82); and "**it is a Message to all the Worlds**" (S.81:V.26-29); not just cultures. When one reflects upon Islam as a religion for all nations and all Worlds, not only for Arabs, one may understand that Islam is far more tolerant towards other cultures, than the mind can understand. It is not unusual to find that people of different races and nationalities are able to embrace Islam and still maintain their culture.

4.2.4.1.3 Reflecting on curative medicine

In the area of curative medicine, Islam has commanded healing in a clear and decisive ordinance. The Muslim is no fatalist, neglecting medicine and

abandoning himself to fate. Quite the opposite, it is compulsory for him to use medicine, which God has provided as a means of cure. When a man asked the Prophet Muhammad (P.B.U.H.) about a medicine whereby he might be healed, wondering whether by doing so, he would be rejecting the decrees of Providence, the Prophet replied:- "It is God's divine decree" (El-Sayyad, 1981:52)

Another well known tradition of the Prophet (P.B.U.H.) states on the subject of healing:- "There is a remedy for every malady and when the remedy is applied to the disease it is cured with the permission of Allah, the Exalted and Glorious" (El-Sayyad, 1981:52). **"O, servants of God seek the medical treatment. God has put a remedy for every malady, clear to whoever knows it and unclear to whoever does not know it"** (El-Sayyad, 1981:53)

These clear instructions have altered human understanding of disease and its cure. They have placed an end to prevalent superstitions of illness and cures. They have set men on the correct path in search of illness and their cures so that they may know, what they had not known before. From these observations it is clear that Islam does not look at modern medicine from a negative point of view but encourages all human beings to try every possible way of reaching a cure for all kinds of diseases and problems. There is a cure for all illnesses provided you know where to look for it, and if there is no cure for the moment, it is our duty to search for it, until we find it.

4.2.4.1.4 Reflecting on rehabilitative and corrective therapy

As for rehabilitative and corrective therapy, Islam strives to prevent incapacity due to disease. Islam accustoms Muslims not to succumb to poor health, but

rather to pray even if only with the eyelid. All aspects of the human body are required to work according to their capacity. As the tradition states:- “Work: for every one will find his way made easy in what God has created him for” (El-Sayyad, 1981:53).

4.2.4.1.2 Need to understand the points of agreement and the points of disagreement between modern and Islamic medicine

(a) I The points of agreement between modern and Islamic medicine

Modern science accepts the truth of something only after it is positively and definitely proved, and The Qur’an likewise requests people not to take things for granted unless they are confirmed through proof. Say: “...Produce your proof if you are truthful”(II:111).

A false accusation says that “Islam was an obstacle against the freedom of thought, restraining scientific investigation and setting barriers in the face of knowledge and philosophy” (Tabbarah, 1978:256). However, Islam compels its adherents to progress, by requiring them to pursue knowledge and learning with special attention. This is because man’s character is formed and promoted by way of knowledge. Allah says: “**Are those who know equal to those who know not? It is only those who are endued with understanding that receive admonition**” (XXXIX:9). The verse offers a special praise of knowledge. God decides that men of knowledge surpass others, and limits the reception of admonition to those endued with knowledge and understanding.

In another verse, The Qur’an declares that people of knowledge are placed in ranks in the Presence of their Lord, and are more favored than others: “God will

raise up, to (suitable) ranks (and degrees), those of you who believe and who have been granted knowledge” (LVIII:11).

In another place, Allah makes it clear that there is no special limit to knowledge: **“Over every lord of knowledge there is one more knowing”** (XII:76). This makes the people of knowledge less arrogant in themselves, seek more knowledge and prepare themselves to face the criticism of others. Allah encourages us to say: **“My Lord, advance me in knowledge!”** (XX:114).

(a) II The points of disagreement between modern and Islamic medicine

It is important to reflect that modern medicine has taken the road of secular education not so long ago, where **Western philosophy allows religious knowledge as a distinct form of knowledge in isolation. This is the dividing point between modern medicine and Islamic medicine.** When reviewing history, we note that it is in secular education that the following can be observed:

- (1) the belief in the scientific method as the only valid approach to knowledge,
- (2) the view of the universe as a mechanical system composed of elementary material building blocks,
- (3) the view of life in society as a competitive struggle for existence, and
- (4) the belief in unlimited material progress to be achieved through economic and technological growth.

During the past decade or two **all these ideas and values have been found severely limited and in need of radical revision.** At the same time the dominant social institutions refuse to relinquish their leading roles to any of the new cultural forces. We are also reminded that the dominant system of health care of any

society cannot be studied in isolation from other aspects of that society, because the “medical system” does not operate in a social or cultural vacuum. Thus, medical systems do reflect basic values and ideologies, but in turn helps to shape and maintain them. This has implications for a developing country like Kuwait who should be critical of their developmental processes, to determine whether they are repeating the history of the West or moving along novel paths.

4.2.4.2 RELATION BETWEEN MAN AND FELLOWMEN

4.2.4.2.1 Medical education as a vehicle of modernization

Medical education in the United States according to Ebert (1977:171-84) “is doing better and feeling worse.” Medical education in the West often is regarded as rigidly resistant to change (Gallagher, 1988a:388). In the past century, medical education is well designed to incorporate and convey new scientific information while “preserving intact its own institutional structure” (Gallagher, 1988a:388). Although it is close to the scientific laboratories that are the engines of modern biomedicine, medical education in itself, is not seen as flexible, much less as a vehicle of modernization that touches and changes other parts of society.

In contrast to modern medicine in Third World societies such as Kuwait, along with other domains of higher education, “is a vehicle of modernization” (Gallagher, 1988a:388). It removes most students residentially, for the first time in their lives, from the protective confines of a traditional family system. Academically it exposes them to “universalistic expectations for learning that is charged with the symbolic modernity of science

and technology” (Gallagher, 1988a:388). It points them occupationally towards a professional career that has little relation to traditional modes of livelihood. Family relationships with fathers, sons, and brothers can do much for each other in a family business, but medicine is a different ball game altogether. The responsibilities of patient care bring the health care professional into contact with sick strangers who ordinarily might be looked at from a different light according to prevailing norms of ethnicity and social rank, but the healing ethic learned and practiced in clinical medical education curtails the influence of those norms. The traditional proprieties of relations between the sexes is very strong in Third World societies like Kuwait, which are strained when male and female students are exposed to each other, and to faculty and patients, in the diverse situations of medical care. For these reasons **medical education is an uprooting experience even for students who originate in the more modernized segments of their society, and it bears the imprint of modernization** (Gallagher, 1988a:388).

The Kuwaiti students do face historically unique, often stressful situations that may become the carriers of new patterns of relationship and consciousness in the society. The establishment of the Health Science Center for medical education is a massive stimulus for modernization in a traditional culture such as Kuwait. However, we are reminded by Kuwait University professor Dr. Mohammed Al-Mahrazi, who stressed at the “Islamic NationsReasons for Weakness and Ways for Revival” conference that a “reasonable mind is the one that uses the legitimate and appropriate religious method” to face challenging situations (Kuwait Times, Wednesday, May 8, 1996:5).

Thus, man should never forget that any knowledge he acquires is indeed vouchsafed to him from God and by His permission. However, the more man studies, investigates, does research and increases his knowledge, the more he realizes the existence of the One God, His attributes and truthfulness of His

Books. God says in the Qur'an: "We shall show them Our Signs in the horizons and within themselves until it becomes manifest to them that it is the truth" (S 41: V 53). Horne (1996:39) gives an assurance that **"there is nothing inherently suspect about every day medical practice."** But he warns by saying **"keep your spiritual machinery well oiled! Some day you may need it."**

There are some special ethical aspects which are related to a health care professional's work more than the work of others and oblige him always to remember Islam's judgments concerning them. There are instances involving the patient - health professional relationship. Under the fundamental code of Islamic ethics pertaining to all human conduct, some are as follows:-

- Decently averting the eyes, as the Qur'an states: "Say to the believing men that they should lower their gaze and guard their modesty that will make for greater purity for them" (Qur'an, S 24: V 30).
- Prudence (honest shyness): "Every religion has its ethics: The underlying ethics of Islam is prudence" (El-Sayyad, 1981:56).

Another aspect of the health care professional's conduct is referred to as "*Islamiyat*" (specific Islamic observances, attitude and ethical principles) pertaining to the medical practice (El-Sayyad, 1981:57). By this, is meant an invocation of God's assistance for the successful outcome of the consultation or treatment. In the words of the Prophet Muhammad (P.B.U.H):-

- "Any act of significance not begun in the name of God will be rendered incomplete."

From the discussion above we note that medical education is a vehicle of modernization in a developing world such as Kuwait, but it is also important to note that not all of Kuwaiti culture may be in line with Islamic traditions. However, it is important to reflect on how to incorporate both modern and Islamic medicine for the training of health care professionals in Kuwait.

4.2.4.2.2 Challenges to social life

As a result of development and associated change, the extended family system is moving towards the nuclear pattern common in other developed countries. The loosening of family bonds has given rise to a number of **social problems**, such as those **involving care of the elderly**, the **increase in divorce rates**, the **increase in young male delinquency** and other psychological problems.

The author during her interview asked a question:- Do you think Kuwaiti people are encountering psychosomatic problems much more today compared to previous times? If yes, what is the reason for it? A common expression used by Dr. Al-Mahmoud to answer this question was: **“Kuwaitis started running before they could walk!”** The implication is that the phenomenal change that has taken place in Kuwait was not gradual, which is required for any civilization. This leap forward is tremendous and is accompanied with unpredictable complications and it is for this reason that **Kuwaitis are unable to deal with stress**. A case in point well demonstrated is an article in the newspaper:- **“A 28-year old Kuwaiti doctor was found dead at Amiri hospital, surrounded by syringes”** (Arab Times, Monday, July 15, 1996:1).

On the medical front there is an increase in psychosomatic problems in the area of management for patients with cerebrovascular accidents, problems encountered in the area of pre and post natal care which may lead to complications like Erbs Palsy, Cerebral Palsy, and other related complications.

Consideration is being given, for possible strategies, to counteract these trends. There are social welfare services that are already well established by the Government which include: the development of co-operative societies (supermarkets); the wide range of welfare payments (for disability, sickness, studentship, widowhood, etc.); and measures to improve safety and job stability in the work-force.

These policies have done much to promote social welfare; but as part of the other changes noted above, **people are exposed to new health problems** as a consequence of changes in the disease pattern. Some of the new problem areas in health have taken on the same pattern that accompanies urbanization, these have predominated in Kuwait and are: a rising accident rate due to automobiles; hypertension and ischaemic heart diseases; stroke; diabetes mellitus; cancer; allergy; tension and stress. The influence of modernization, has tremendous impact on all aspects of Kuwait societal problems. What the **society needs is to readdress the Islamic values that is and was known to them, but has been neglected.**

4.2.4.2.3 The implications from premature importation of tertiary-care-orientated approach to medical education and health care delivery

The process of modernization in medicine and the transition from traditional healing practices to modern, science-based medicine is complex and painful and may be associated with unpredictable complications. The implications from premature importation of a tertiary-care-orientated approach to medical education and health-care delivery is many fold:

- With the best of intentions, developing countries sometimes attempt to import Western-type medical education and care systems although the nation has other, more urgent health-related needs (such as safe water, better housing, delivery of primary care and promotion of preventative medicine). This is well explained by Ronaghy and Simon (1985:300) when they mention how nationals from **developing countries** are trained in the tertiary care systems of Western countries, and how they may **attempt to transplant Western systems of medical education and health care delivery to their own countries and superimpose them onto existing traditional patterns.**
- Modern medical technology and progress in medicine, along with the trend towards a permissive society creating disregard for established moral and ethical values, have affected medical health-care practitioners adversely. It is now more difficult for them to advise a type of treatment or the use of a new technique because of the lack of guidance from the **various major religions which are yet to formulate moral, ethical and religious stands on matters relating to the developing technology.**

- Over the long run, the question of relevance of the medical curriculum is important when considering physician migration. Cooperative research into the role, functions, and programs of medical schools should be undertaken. So far the tendency has been for medical schools to develop to meet the needs of the industrialized countries, particularly the United States. This orientation of the curriculum toward America and the West has encouraged migration. At the same time, those **physicians who have remained in their countries have often been ill equipped to deal with the kinds of medical problems they encounter in their own countries** (Ronaghy, *et al.* 1974:541).
- One **suggestion** that needs further study and consideration is that medical schools change their curriculum to produce **health care professionals** who are **community-orientated rather than hospital-orientated**, subsequently adopting programs to train professionals specifically to practice in small cities and rural areas. This should not lead to the denial of opportunities to receive proper specialty training if desired, as this denial would lead to increased migration. Regional centers of excellence should be developed for those interested in advanced specialty training, contributing to the development of a medical school system, which is diverse according to the needs of the country, rather than uniform.
- In developing new curricula and programs, the training and experience of health care professionals returning from abroad can be helpful. Having worked in programs that are successful, they have knowledge of the pitfalls that can be encountered and also of ways to meet them. Most important, they know, having had experience in both places, what is relevant to conditions in their own country, what is irrelevant and should be excluded, and what innovations need to be made to tailor new training programs to the particular needs of the country.

4.2.4.3 MAN AND HIS ENVIRONMENT

4.2.4.3.1 The impact of science and technology in the health sector in Kuwait

The impact of science and technology in the health sector in Kuwait has had some adverse effects on both the individual and society (Hammoud, 1986:61). Fletcher, *et al.* (1981:251), presented a paper to the National Symposium on the Impact of Science and Technology in Kuwait, where they reported four such negative effects:

(a) Medical mismanagement of diseases

First, due to the development of advanced diagnostic and therapeutic facilities, medical mismanagement diseases have been introduced. Fletcher, *et al.* (1981:251), found that approximately five percent of all hospital admissions were precipitated by complications of diagnostic or therapeutic procedures and that 10-18 percent of hospitalized patients experienced adverse drug reactions that resulted in fatality rates of up to 13 percent.

The author addressed a question, during her interview with prominent academics in Kuwait, as to whether they were satisfied with the standard of modern medicine in Kuwait? Most of the people involved in training health care professionals felt that the situation in the hospitals leaves much to be desired. Some comments were, that there were no proper objectives for running the hospitals, both from the Ministry and from the University. It appears that a lot depends on who is the Minister of Health and what is his

relation with the University staff for the smooth running of hospitals and the university.

Some expressed concern, that in view of the deteriorating situation in the hospitals, there was a **need for privatization**. A comment raised by the author was that, certain private hospitals were finding it difficult cope with expenditure. Recognition of this fact, made some express that there was need for privatization with government subsidy.

Another question addressed by the author was: What is your prediction regarding the future of health care in Kuwait? What would you like to see improved in the hospitals in Kuwait? Again the question of appropriate objectives for both the hospitals and universities were mentioned. Dr. Al-Mahmoud strongly **believed that if people were paid better salaries, the condition would change**. He gave an example, that it is better to recruit four competent nurses and pay them more, instead of recruiting six average nurses and pay them poorly.

Concern was also expressed about Kuwaiti health care professionals who are trained abroad who return with enthusiasm to effect change. However, this change is not possible because they have to fight against a bureaucratic wave and eventually they will need to streamline with the wave. The question is not what you know but who you know!

(b) New technological equipment acquired on non-priority basis

Second, as a result of the expansion of science and technology, new technological equipment is often acquired on a non-priority basis, and with

the increase in capital and running costs, a great burden is placed on the national economy.

(c) Emphasis on curative treatment

Thirdly, there is a tendency to emphasize curative treatment with a corresponding neglect of preventive measures.

(d) No provision for proper servicing and maintenance

Fourth, there is a trend to acquire expensive and complex equipment without, in most cases, provision for proper utilization, servicing, and maintenance.

(e) Dependency on non-Kuwaiti health care professionals

To these adverse effects of health-related technology must be added another set of problems that seem to hinder the full utilization of existing knowledge and the adequate provision of health services. There is a problem of general dependency on non-Kuwaiti health care professionals and other non-Kuwaiti health personnel. According to the Minister of Health, Dr. Abdul Rahman Al-Muhailan, the ministry employs 2,710 doctors, 857 of them are Kuwaitis; 399 dentists, 95 are Kuwaitis; 7,385 nurses with 1,133 Kuwaitis (Arab Times, Wednesday, May 8, 1996:6). As for the other medical personnel, there is a strong shortage of Kuwaiti graduates in the sciences to fill up the technical positions in the health system.

Another question addressed by the author during her interview was: What is your opinion regarding medical specialization in Kuwait? It was openly expressed that Kuwaitis who pursue advanced education have interest in "power" or the need to take the chair position. It was felt that **advanced education should be pursued to demonstrate the clinical competence in both the art and science of the medical profession.** Optimism was expressed that specialization could take its respectable position in the medical profession, but a lot will depend on the caliber of the Kuwaiti health care professionals to identify their own needs. Factual statement given by Dr. Al-Bader was: "Students can only acquire the attitude of excellence through role modeling."

(f) Abuse of free medical services

The easy access to modern health care facilities in Kuwait, encourages some people to repeat their visits to doctors for minor physical ailments. This increases costs, as some people receive more expensive care than they need, and more generally, it also reduces the returns on additional health expenditure. The per capita cost of medical care has increased from KD 107 in 1984 to KD 150 in 1995 (Arab Times, Wednesday, May 8, 1996:6).

From these observations, it is important for Kuwait health care administrators to address the problem of **abuse of medical services, and how best to curb such practices.**

(g) Concern about introducing medical charges in Kuwait

The Minister of Health, Dr. Al-Muhailan, has warned members of parliament that it was **no longer possible to provide medical care free of charge** and it was high time that **charges are to be imposed on health services** (Arab Times, Wednesday, May 8, 1996:1 and 6). He expressed concern about the deterioration of the health services in the country, and that if the present situation continues to prevail, an imminent crisis is inevitable. He explained measures to be taken by the government to improve the standard of medical care, which include:

- Maintaining the current level of health services and improving it requires a vast expansion in the size of these services through establishing new hospitals, clinics, maintenance for others. Thus, there should be a contribution in shouldering spending on health services.
- He spoke about the proposed health insurance scheme and that it should be discussed further. He mentioned that the proposed charges on expatriates living in Kuwait will cover only between 20 to 50 per cent of the actual cost. The Council of Ministers on Sunday, 12th May, 1996, gave its **provisional approval to the Health Insurance Scheme for resident and visiting expatriates** and asked the Health Minister to work out the details (Arab Times, Monday, May 13, 1996:1). The Health, Social and Labor Affairs Committee at the National Assembly held a session to discuss the health insurance issue. The Committee Chairman Dr. Abdallah Al-Hajri said, the most important characteristics of the proposal is that it be implemented on expatriates only, and it will not include domestic helpers and government workers, but will cover private sector laborers. **The rules say a new expatriate will not be granted residency until after securing health insurance.** Expatriates already residing in Kuwait should take up health

insurance as soon as their residence expires (Kuwait Times, Monday, July 15, 1996:1)

- He said that clinics receive over 18 million visits per year whereas hospitals receive over four million. Commenting on the issue, Dr. Ahmad Al-Khatib said doctors are not treated well in Kuwait and they are not paid well too. He regretted that until now salaries of doctors who worked during the invasion have not been paid.
- Other members of parliament complained that patients who deserve to go abroad for treatment are not being sent. The Assembly has agreed to refer the whole issue to the Health and Labor Committee for further discussion.
- Members of parliament headed by speaker Ahmad Al-Saadoun, voiced their concern at the government for failing to ask public establishments to submit biannual reports to the Audit Bureau as part of the requirements for preparing the reports of Public Funds Protection Committee.

The author, during her interview addressed a question: What is your opinion regarding the introduction of medical insurance in Kuwait? It was felt that initiating medical insurance only for the expatriate population was demonstrating social injustice. The medical insurance should be applicable for both Kuwaitis and expatriate population. Most felt that the pros and cons of medical insurance will only be realized after its implementation. Concern was expressed that there is a lack of proper planning and management. In addition it was felt that ideas cannot be implemented until they are sufficiently researched.

(h) Real crises expected in education

A Kuwait University professor of political science, Professor Shafiq Al Ghabra said a real crisis was being perceived in education in Kuwait (Arab Times, Monday, May 20, 1996:3). He reiterated, that nearly five years after liberation, feelings of frustration and disappointment are rife in Kuwaiti society from government failure to live up to its hopes and expectations and to remedy problems occurring after liberation which include:

- Failure on the part of the government to provide good labor force to the market.
- The educational philosophy in Kuwait would have to be transformed to keep in step with objectives of the private sector, which is expected to strongly contribute in employing national manpower in the coming years.
- The budget deficit, sparked mainly by a fall in international prices of oil, has forced the government to plunge into reserves for future generations, which has already been substantially used to cover liberation and reconstruction costs.
- With the continuous threat of the Iraqi regime in Baghdad, Kuwait security is at stake and therefore Kuwait is still shouldering rehabilitation costs of the army and armaments purchases, besides the costs of joint military maneuvers carried out by the Kuwaiti Army with allied forces. Kuwait will remain a taxpayer in as much as the Iraqi regime maintains its military posturing against Kuwait.
- Visa trafficking is tampering with the labor sector. Influential persons were importing a surplus of expatriate labor into Kuwait, triggering an imbalance in the Kuwait demographic structure and an attendant rise in the crime rate.
- One of the most dangerous issues facing the government within the next four years is unemployment. More than 57,000 new graduates will be job-hunting, which will strain the government's ability to provide for new jobs.

- Prof. Ghabra, concluded by saying that the parliament should concentrate on more pressing problems, instead of getting bogged down in trivial issues like the proposed ban on co-education.

The above discussion on the implication from premature importation of tertiary-orientated approach to medical education and health care delivery and the impact of science and technology in the health care sector in Kuwait, has clear implications of the relation-axes model and the competing influence of “industrial mentality” (introducing medical insurance) and the cultural identity (concern for Arabization of medical education and segregation of sexes). These implications has clear connotation with regard to the influence of modernization which is already ingrained in the education and health care system in Kuwait. **This surely causes conflict and double standards in trying to visualize an Islamic country with such disposition.**

Due to the conflicts and double standards, the author during her interview addressed a question: Do you think Islamic medicine could be incorporated into modern medicine? Many expressed reservation with reference to this question. They felt that religion and politics were two different ball games and it was difficult to perceive how one could be incorporated into another. A strong comment made by Dr. Al-Bader was whether there was such a thing as Islamic medicine. After some explanation, it was felt that maybe Islamic medical ethics could be incorporated into the curriculum for training health care professionals in Kuwait. Dr. Al-Bader said that he knows of a Kuwaiti female who is studying abroad with regard to this area and she would be an important resource person to look into this area.

It is interesting to note that there are parables in the Qur’an that have relevance to the dynamic nature of man and is everyday involvement. On the subject of a harmonious environment, where safety and accident can be

prevented, Islam has established a basic field of law which states that every accident has a cause. To avoid accidents, the Muslim must remove their causes and protect himself. The Qur'an states: **"And make not your own hands contribute to your destruction"** (Qur'an, S 2:V 195).

4.2.4.3.2 Need for care in preservation of the environment and its species

The first international conference on the human environment was held in Stockholm in the period between the 5th and 16th June 1972 to consider the need for joint principles to guide and inspire human beings in the preservation of the human environment. In this conference, two main points of view of the environment emerged. The first is that of the developed industrialized countries, who were mainly concerned with the environmental problems on the agenda, while the second, is that of the developing countries who believed that the problem as it is set in the agenda is not their concern in the first place, since their industrialization program were still in their initial phases. The discussions in the conference led to an expansion of the concept of the environment, which came to include the social environment in addition to the natural environment, and the participants raised the motto **"Poverty is the greatest pollutant"** (Kuwait News Agency, 1992:25-26).

This conference concluded its work with the issue of Stockholm Declaration including 26 principles which may be summed up as follows (Kuwait News Agency, 1992:26-27):

- 1. The responsibility of man for the protection and development of the environment for the present and future generations; the preservation of the natural resources of the earth, including air, water, soil, fauna and flora.**

2. Preserving the earth's capability to produce living renewable resources, and making mankind responsible for preserving a legacy of living organisms and in particular those species that are threatened with extinction.
3. The exploitation of natural resources in a manner that ensures their continuity, and giving all mankind the opportunity to make use of any such exploitation.
4. Halting the dumping of toxic substances and release of intense heat in a manner that exceeds the capacity of the environment to reverse it; the prohibition of pollution of the sea to guarantee the safety of aquatic ecosystems.
5. Accelerating the transfer of financial and technological assistance to the developing countries to deal with environmental shortcomings resulting from underdevelopment and disasters.
6. Guaranteeing the right of the developing countries to get appropriate prices for basic commodities and raw materials; promoting the development of these countries, and making available the resources to safeguard the environment.
7. Coordinating the protection of environment with the requirements of development, and avoiding the adverse effects on the environment in the planning of cities and human settlements.
8. The application of science and technology to the management and monitoring of the environmental resources.

9. Encouraging scientific research in the environment and extensively **raising environmental awareness among different generations.**
10. The right of countries to exploit their natural resources provided that the environment is not adversely effected for others, and developing International Law concerning liability for compensating the victims of pollution.
11. The cooperation of all states on an equal footing to deal with international issues relevant to safeguarding and protecting the environment, and entrusting international organizations with the role of an active and effective coordinator in this area.
12. **Seeking to eliminate nuclear weapons and weapons of mass destruction to safeguard the environment from the adverse effects of their use.**

The Rio de Janeiro conference held in the first half of June 1992 was the second international conference devoted to the environment. The twenty years between the holding of these two conferences has witnessed tens of meetings and conferences and the concluding of many agreements to protect the environment from pollution. In March 1985, twenty countries and the Economic Commission of Europe signed an international treaty to protect the ozone layer. This treaty went into implementation in September 1988 (Kuwait News Agency, 1992:27).

The important implications of these meetings is that international effort is being made to safeguard the environment be it land, air or sea , and this effort is becoming more and more intensive year after year, and awareness of the environmental problem has become closely linked with its protection. In safeguarding and protecting the environment would definitely have a positive

contribution to health for present and future generations. Environmental protection should be incorporated into the training of health care professionals.

4.2.4.3.3 Health care as a carrier of modernity

Health care accommodates into the structure of modernity in a very special way. The aims of contemporary health care which is to prevent, to alleviate, to cure disease, are certainly not new in human history. The aims of the modern health care professional to accomplish these aims are profoundly different from the premodern health care professional. The main differences between the modern health care system and the traditional health care system is that the former is based upon scientific knowledge and the use of mechanical power.

Modern health care from the perspective of its provision is increasingly the "object of calculation and rationalization" (Gallagher, 1988b:64). Within the past hundred years, the use of terminology with reference to diagnosis and treatment from a scientific point of view have become sharply segregated from other forms of traditional healing practices. Health care which had a culturally bound vital feature of the premodern social structure, is now transformed into a major productive enterprise in so called modern societies. The learning of health care skills is not left to the notion of informal transmission from one generation to the next, as with traditional healing roles, but is instead carried out systematically through formal education. The practice of health care is generally a full-time livelihood and a lifelong career for those persons trained and authorized to provide it.

The modern notion of health care as a "commodity" emphasizes its calculability. Health care is not a commodity from the premodern standpoint of the midwife in the village or urban neighborhood where she provides her services. Delivering

babies is an activity that, in addition to meeting a human need, confirms her worth in an important social role, and brings her into sociable contact with clients already known to her (Sukkary, 1981:26-34). The midwife's work may well provide income in cash or in kind, but it is not a commodity in the sense of consuming calculable resources or constituting a stream of economic value in an ongoing system of production. The premodern health care provider with reference to pre and post-natal care had a casual economic posture in contrast with that of the contemporary obstetrician (or other physicians) whose offerings has a far more systematic character and tangible monetary value.

In drawing attention to the calculability aspect of modern health care, one need not claim that physicians or other health care providers look upon their patients with corruptible eyes, that they perform needless procedures for profit, or that they are part of "The New Medical-Industrial Complex" (Relman, 1980). This does not mean, that the author claims that this phenomena exist and is widespread throughout the health care system, but to say that these phenomenon are emphasized rather than being an integral expression of the ways in which modern health care is calculable.

In the author's opinion the concept of health care as a "calculable resource" in its essential feature as a "carrier of modernity" in Kuwait, maybe observed in the private sector than in the government sector. However, the modern health care is a worthwhile enterprise in view of its specialization and objective scientific approach to new techniques for intervention. But in view of its relevance to the creation of a health care system as a major ongoing "establishment" that has a calculable aspect will need to be addressed for its immediate cause-effect relationship.

The author during her interview addressed a question: Do you think that modern medicine has the ability to influence the culture, tradition and value

systems in Kuwait? There were different reactions to this question. At the one extreme, some felt that there was no need for maintaining culture. An example given was everyone in America is Americanized, so why the need to maintain culture? Another extreme opinion was that modern medicine has no ability to influence the culture, traditions and value systems in Kuwait. There was however, a belief that modernization is influencing the culture, traditions and value systems in Kuwait. It was felt that the proper authorities should monitor curriculum changes in the schools and at Universities to ensure the continuity of culture and traditions in Kuwait. This surely will require proper organization and management.

From these reactions, it is important to understand the influence of new technological and organizational structures of modern medicine from industrialized societies to that of developing societies. This will enable the observer to explore the social, political, economic, and cultural factors that influence this process, especially those features that impede it and those that impel it.

Health care services which are extended to developing countries such as Kuwait include the use of pharmaceuticals, prenatal and childbirth, and, at a higher level of technology and sophistication, surgery and other hospital-based services. However, this health care is introduced into developing societies within the value context of modernization. "This means that it is sought and appreciated not only for the specific tangible benefits it offers but because of its association with, and representation of, the complex of meanings linked with modernity" (Gallagher, 1988b:67).

4.2.4.3.4 Making the world safe for capitalist imperialism

The question of **brain drain** from developing countries to developed countries (Ronaghy, *et al.* 1974:540); the **sale of irrelevant high medical technology** like calls for modern hospital complexes to underdeveloped countries (Mahler, 1978) and the **shift of human experimentation to other countries where informed consent and safety may not even be at issue, to say nothing of being fully assured** (Elling, 1981:87) may lead one to say that the historical role of public health and other medical programs is **making the world safe for capitalist imperialism** (Onoge, 1976:897). This surely has **implications for the influence of modern and Islamic medicine on the training of health care professional in Kuwait and its relation to the power structures of the nation and country at large.**

4.2.4.3.5 The advantages of traditional approach to medicine

Some modern health care professionals have mystified the medical profession's power over illness to the point of omnipotence. These dangerous attitudes have helped Americans spend more than \$500 billion on health care during the last 5 years (Williams, 1971. as quoted by Martin & Martin, 1982:22). We are learning from research that emotional and mental states can be improved through proper nutrition. The advantages of traditional approach to medicine has recently been accelerated due to the **"holistic" health movement. Holism "is the study of the whole person, his totality: physical, mental, spiritual, behavioral, emotional, nutritional, ecological and any other factors that might affect his well-being"** (Rosch & Kearney, 1985:1407). It is interesting to note that North

American Urban Studies indicate that persons with a higher level of education tended to use traditional medicine more than those with lower levels (Waldram, 1990:11). Many authors today look to the traditional healing practices that were neglected in the past, some of these authors include: Rosch, and Kearney, (1985:1405-1409); Martin & Martin (1982:22); Rahman, (1984:585-597); and Murray & Shepherd (1993:983). The advantages of a holistic health are numerous for both patients and health care professionals. Some of these advantages include the following:

- Today many patients have interest in naturopathic approaches to healing which has **created an educated, remarkably well-informed patient population**. It teaches the patient a total sense of personal responsibility.
- An appreciation of the **multi-faceted approach to "wellness"** which acknowledges the role of nutrition, diet, exercise, behavioral modification, prayer, fasting, etc., in the **enhancement of health and the prevention of illness**. "Its effects are immediate and creates a better sense of well-being." (Martin & Martin, 1982:22)
- All modalities of healing are used to prevent a suspicion or distrust off or an anxiety regarding the long term consequences of pharmacological intervention as well as the potential hazards of irradiation, chemotherapy, thermograph, sonography, and the like.
- There are a number of entrepreneurs and even charlatans who seek to exploit the appeal of "holism" or naturopathic approaches. Many of the holistic programs they developed, irrespective of merit, evoke some degree of enthusiasm and adherence, and even therapeutic success. Health care professionals are pressed for time to become sufficiently familiar with traditional forms of healing, especially those who are in close proximity

with a specific culture and its environment, to be able to make informed judgments and to counsel their inquiring patients.

- The patient's inner capacity for change has a distinct and clear direction to better health and well-being.
- Patients can continue patterns that are healthy and significantly decrease problem reoccurrence.
- Self-discipline is learned and appreciated.
- Disease prevention is enhanced for patients.
- Different health care professionals can benefit from all these aspects and be a significant model for patients.

As a partial response to these currents and trends, the definition of the traditional health-care-patient relationship is undergoing revision. Emerging is a new and equal partnership between healer and healed based upon a fundamental assumption that the health care professional and patient are co-therapists, and while the physician remains the storehouse of medical knowledge and technical expertise, the patient is the covalent source of those factors without which no healing can take place. Thus, the patient should have faith, confidence, hope, optimism and cognitive cooperation.

In this study, an attempt was made to investigate some implications of the influence of modern and Islamic medicine on the training of health care professionals in Kuwait. When reflecting on modernization concepts, "one of the characteristic features of modern medicine is its status as a calculable commodity or resource" (Gallagher, 1988b:84). We realize that premodern

systems of health care lacked this feature. There is a resurgence in the interest to establish a new program to explore the possibility of traditional medicine functioning in conjunction with modern medicine. When we reflect on **modernistic attitude of “self-achievement” and “self-determination,”** we may understand that **certain modern techniques are sometimes observed to influence and transform relationships [Chapter 1 (1.3.3)].** As these techniques have reached so many different aspects of social life, they also change human relations by **introducing competition, self achievement, individualistic thinking and behavior.** Since the modern medical model places great emphasis on the relation between man and himself, in terms of individual autonomy and self-determination, this surely will affect the relationship between man and fellowmen, especially when it concerns a patient and who he decides to choose as his health care provider. In addition, modern medicine surely demonstrates **limitation** when we consider the **fourth relation-axes, which is man and the transcendental.** The spiritual dimension is a difficult concept to understand because of its relation to the unknown. It is in analyzing the fourth relation-axes between man and the transcendental that we may begin to understand the importance of the **spiritual dimension in health care, which has been ignored in modern health care delivery and which is beginning to demonstrate its significance.**

4.2.4.4 MAN AND THE TRANSCENDENTAL

Spiritual dimension in health care was addressed in Chapter 2 (2.3.4) where Wielemans and Chan (1992:26) reminded us that **only during the last centuries in the Western countries, that a change from mainly religious-based principles to secular-rational values has brought about profound crisis in faith and a renewed search for meaning of life.**

We also realize that the mechanistic world view of Newton and Descartes is now obsolete and that it is **important to have a new vision**. The modern medical focus on the physical dimensions of illness was a further explanation of "mind-body dualism." Where mind is handed over to psychiatrist and behavioral scientists to study, while the body is handed over to modern medical science and its diagnostic technology.

Modern health care professionals have played a major part in bringing about this dilemma by insisting that they alone are qualified to determine what constitutes illness and to select the appropriate therapy. Capra (1982:139) reminds us that as long as health care professionals maintain their positions at the top of the hierarchy of power within the health care system, they will have the responsibility of being sensitive to all aspects of health.

When addressing the definition of spirituality and spiritual health we need to take care of the observations made by Leean (1988 as quoted by Goodloe and Arreola, 1992:223) concerning spirituality: (1) **people's quest for this transcendence often leads to deception when that which they sought was idolatrous, not spiritual**; and (2) if internalized religious convictions are a part of one's spirituality, there must be an element of reflection upon these principles. If not, its essence would become distorted.

From the observations above, there seems to be a doubt about the credibility of the spiritual dimension in health. **Unless and of course we do not recognize that true revelations are from God whose purpose is to direct mankind to understand the ultimate meaning and significance of this life, we will continue to doubt the credibility of the spiritual dimension.**

What is important for us to realize, is that, it is in the sphere of health that man begins to understand the existence of the spiritual dimension - the terminally ill,

mentally retarded, or physically disabled, is capable of formulating a spiritual response to life irrespective of their belief or disbelief in God. Another factor that is important to address is the **“sense of alienation and lack of connectedness characterizing today’s society”** (Goodloe and Areola, 1992:211). The recent emphasis on health and well being especially for life threatening illness or disease such as AIDs, cancer, rheumatoid arthritis, and psychosomatic illness related to social ills for which there is no cure for the moment, there is **increased emphasis on the establishment of new training program to explore the possibility of traditional medicine functioning in conjunction with modern medicine to establish a holistic approach to patient care** (Elling, 1981; Fulder, 1986; and Akerele, 1986). Modern medicine is known throughout the world, but it is the traditional medicine which has specific connotation to the different aspects of culture and the upbringing of the health care professional where societies differ.

The author during her interview addressed the question: Do you think that Kuwait has something to offer to the West, like the spiritual dimension in health care? Again reservation was expressed regarding this question. A comment received was, if people wanted to learn about this dimension, they can personally go and read it themselves.

Another question addressed was: What is your opinion regarding Islamic medicine in Kuwait? The modern educationalists in Kuwait felt that it is not very clear what is Islamic medicine.

Sayyid Yousef Al-Rifa’i who is the chief patron of Neda ul Islam expressed and demonstrated how he extends help in the form of prayer without charge to patients who are depressed, who need to be close to Allah, who maybe facing problems related to emotional, economic or other related problems and people who need help in caring for their terminally ill patients. He expressed that

Muslims need to understand the terminology of “*wasilah*,” meaning the need for help by someone more pious. He gave an example, that the Prophet Muhammad was sent the revelation through Gibrael, the angel. Another example given was, it is an Islamic doctrine that whenever you are traveling, you take the blessing from the older people. The prayer of the old and elderly is accepted more readily by the Creator than the individual’s own prayer. In these observations are the pearls of wisdom which modern health care professionals lack.

Islamic medicine and its relevance to the relation-axes model with special consideration to man and the transcendental addresses questions about human life and the human body and the socio-religious norms associated with human life and the human body where societies differ. Thus, while the medicine practiced by Muslims and for Muslims is generally the same medicine practiced in the West today, the Islamic medicine as is advocated in the Qur’an and *Hadith* is different depending on the Muslim upbringing of the health care professional. This means that the use or non-use of a renowned medical treatment by Muslim health care professionals will sometimes be guided more by Islamic medicine derived from Islamic law than by purely medical considerations.

4.2.4.4.1 Is there a need to educate the spirit ?

Does the modern world today need to educate the spirit? Our materialistic world has been dominated by the belief that through gradual material progress it attains perfection. The events of the late years of the 20th century have shaken this view (Tabbarah, 1978:177 and Banks, 1980:195).

The modern progress we have achieved in the domain of science and matter has brought forth no lasting results in making people free of disease and illness. On the contrary, it has brought the wretchedness and ruin that results from successive wars. The races still hate one another, this is a disease in itself; strong still exploit the weak; all of this indicates that the materialistic civilization has failed and lacks refined and sublime values.

It is important to understand that spiritual perfection does not reside in material progress; it is an everlasting essence that resides deep in our spirits, whether we are backward or well ahead in material advancement. It is our duty to search for this everlasting essence within the folds of our spirits, to look for its expression inside us, as well as for its forces that we share with others. The degree of perfection or any where near perfection can only be established in proportion to our awareness of these forces.

4.3 CONCLUSION

In this chapter, a comparison of the Islamic and Modern views of medicine against the background of contemporary Arab society and some implications for the development of an appropriate system of medical training in Kuwait is discussed. In addition, the interviews conducted with prominent Kuwaitis is discussed as additional information.

We know from Wielemans & Chan (1992:26) that **“Industrial mentality”** stresses the importance of efficiency and effectiveness in all human relations.” Certain **“modern techniques”** like introduction of medical insurance and privatization is and will develop in the health care delivery system in Kuwait which will influence and transform relations. Since these **“modern techniques”**

have reached so many different aspects of social life, they also change human relations by introducing competition, self-achievement, and individualistic thinking and behavior. There is a greater need for individual autonomy and self-determination. "The introduction of contract-relations between people, together with an increased strategic attitude of deliberate planning and steering capacity have chilling influences on inter-individual and social relations in modern societies" (Wieleman & Chan, 1992:26). Developing countries like Kuwait need to closely introspect the concept of medical insurance and privatization to clearly understand the implications for their own values and traditions.

In the author's opinion, a lot more can be achieved by recognizing the human resource and development and allowing a form of promotion and recognition for individual effort. **Privatization and medical insurance are Western ideologies and their modern influences whose problems have a cyclic nature. When these ideologies are introduced in a developing world like Kuwait, they need to be closely examined to establish if they are in accordance Islamic traditions and beliefs.**

In this study, we examined the relationship between the Industrial mentality, cultural identity and education. As this three basic concepts include too many variables, the most relevant aspects of both industrial mentality and the cultural identity could be summarized in the notion of "core values." It is clear that the **dominant groups in Kuwait are giving priority to preserving the cultural heritage by the very cry for "Arabisation of Medical Education" and "Segregation of sexes at Tertiary Education" but at the same time there is a need for introducing medical insurance and privatization.** From these observations, it is clear that in Kuwait, the dominant group is giving priority to preserving the cultural transmission and incorporating industrial mentality. However the cultural transmission has a greater influence than the

industrial mentality. **Wielemans & Chan (1992:34)** explain that if there is equal priority on both industrialization and cultural transmission, the core curriculum will reflect a balanced compromise. When studying the present situation in Kuwait, there is somewhat a conflict between the introduction of the “industrial mentality” and the core values of the culture as the former is seen as a threat to replace the cultural values. The core curriculum should be used to inculcate the cultural values and for the purpose of transmitting culture. It is also clear that the interest of the pressure groups in Kuwait society are expressing their views on educational policy concerning the issues arising from the interaction of industrial mentality with the indigenous culture. From these observations it is clear that the multivalent phenomenon according to the fuzzy logic is operating, where it not the all or none phenomenon, but that all point on the continuum from 0-1 have a value (Badenhorst, 1996:1-11). Also, all forms of chaos and complexity theories can be transformed into a higher form of order by means of a process of self-organization (Badenhorst, 1996:3)

It will be interesting to note how these cultural forces, both Arabisation of Medical education and segregation of sexes at tertiary education will be implemented to clarify the conflict/contradiction or harmony in the core curriculum of training health care professionals in Kuwait.

CHAPTER FIVE

RECOMMENDATIONS, IMPLICATIONS AND CONCLUSIONS ON THE REVIEW OF MODERN AND ISLAMIC MEDICINE: SOME IMPLICATIONS FOR TRAINING HEALTH CARE PROFESSIONALS IN KUWAIT

5.1 INTRODUCTION

The present study set out to investigate modern and Islamic medicine: some implications for the training of health care professionals in Kuwait. It is interesting to note that secular education in the training of health care professionals does not include all aspects of education that is required to understand life and meaning in life from a different cultural perspective. Throughout the study an attempt was made to shed light upon the fact that culture, educational socialization and "industrial mentality" are basic variables in the process of modernization. In this study an attempt to reflect on the relation-axes model introduced by Wielemans and Chan (1992:19) was used, in addition to the need for the arrangement of information with specific reference to health and illness, delivery of health care and the training of health care professionals. **This study has found that "industrial mentality," culture and educational socialization are important variables in the process of modernization, especially modernization of medical education.** Interest in this study arose from the fact that the author is a physical therapist and is involved in the training of health care professionals in Kuwait. A decade of experience in working in close contact with Arab health care professionals and patients made her aware of the importance of the needs of the population in terms of health care, delivery of health care, and their understanding of the concept of health and illness. The author realized that modern medicine does not have answers to all health care problems especially those related to psychosomatic problems related to social ills for which there is no cure for

the moment. The author also happens to be a Muslim and her knowledge of Islam made her aware of the importance of the spiritual dimension in health care which is known to the Islamic world but at times ignored and which is unknown or rather ignored by the modern Western world, and she attempts to make an academic audience aware of this dimension.

5.2 REVIEW OF THE STUDY

In Chapter Two the focus was on health and illness in context with particular reference to the Modern (Western) world view of medicine and its implications for the system of training health care professionals. We observed that **modernization does influence both at an individual level and at the societal level in the provision of health care and the training of health care professionals in Kuwait.** Modernization is a dynamic process whereby the individuals change from a traditional way of life to a more complex, technologically advanced, and rapidly changing style of life which is encompassed in the “industrial mentality” as explained by Wielemans & Chan (1992:20-21). We note that culture plays an important part in many spheres of health care: (1) Culture is a set of guidelines which individuals inherit as members of a particular society. (2) Culture provides individuals with guidelines as to how to transmit this information to the next generation. (3) Culture is seen as an inherited “lens,” through which individuals perceive and understand the world that they inhabit, and learn how to live within it. Growing up within any society is a form of enculturation, whereby the individuals slowly acquires the cultural “lens” of that society [Chapter 2 (2.2.2.2)]. Therefore, cultural background has an important influence on many aspects of people’s lives, including health and illness and the delivery of health care. We are also reminded that core values can be regarded as forming one of the most fundamental components of a group’s culture and that rejection of core values carries with it the threat of exclusion from the group [Chapter 2 (2.2.2.4)]. Therefore, it is important to readdress the present modern health care professional training in terms of cultural diversity. In

addition, the relation-axes model is discussed in relation to man and himself, man and fellowmen, man and nature and man and the transcendental. Lastly, the author reflected on the critique of modern medicine in terms of the delivery of health care and the training of health care professionals.

In Chapter Three, the focus was health and illness in context with particular reference to Islamic medicine, more specifically Kuwait, and its implications for training of health care professionals. We noted the importance of understanding the process of modernization and its influence on training of health care professionals in Kuwait in view of its culture and traditions and why it is important for any society to reassess their model for human development and well-being and providers of health care. **The important observation is that health care is seen as a carrier of modernity especially in two spheres:**

(a) Cultural aspects in view of man and himself

In the process of training health care professionals according to the modern medical system, students do undergo a form of “acculturation” whereby they gradually acquire a perspective on ill-health that will last throughout their professional lives [Chapter 2 (2.2.2.1)]. This maybe quite contrary to what individuals may have inherited as members of a particular society, and which tells them how to view the world, how to experience it emotionally, and how to behave in it in relation to other people, to supernatural forces and to the natural environment. This surely will cause conflict when transmitting these guidelines to the next generation. Thus, it is important to understand what is this “cultural lens” which will incorporates both the dynamics of modern medicine and Islamic medicine which views life from a different angle.

(b) “Industrial mentality” in view of man and his fellowmen

The introduction of industrialization and the penetration of the “industrial mentality” will influence not only the pursuit of cultural equilibrium, that is, the ecological, the social, the psycho-somatic, but also the religious dimension which views man, society and man’s role in nature and in the cosmos which is contrary to modern medical view of man with specific reference to “mind-body dualism.” These new relations will subsequently change the socialization processes, the quality of culture transfer especially through the socializing agents of the family and the educational system. This implies that industrialization in modern medicine can be perceived as a new culture, characterized mainly by the “industrial mentality” that is able to influence the training of health care professionals in Kuwait.

In Chapter Four a comparison of the Islamic and Western views of medicine against the background of contemporary Arab society and the implications for the development of an appropriate system of training health care professionals in Kuwait was discussed. **The “core-curriculum” was reflected upon using the relation-axes model to identify qualification objectives, identification objectives and social functions which reflect to a great extent the social needs and national goals of the nation [Chapter 4 (Table 4.1)].** In addition a comparison between modern and Islamic medical models was elaborated upon, with a contrast in form of a table between the principles of Islamic education and Western secular education as perceived by Muslims [Chapter 4 (Table 4.2)]. Throughout chapter two to chapter four, an attempt to reflect on the relation-axes between three distinctive dimensions of reality, namely, the “industrial mentality,” culture, and educational socialization as introduced by Wielemans and Chan (1992:19) which embodies sets of values that have given human behavior different forms and shapes have been discussed.

5.3 Recommendations, motivations and implications for this study

5.3.1. Recommendation

That research be undertaken to investigate the possibility to operationalize the Core Curriculum for health care professional training in Kuwait.

(a) Motivation

The consideration of what is knowledge? defines the dividing line between Islamic and Western concepts. The difference in perception rests on the fact that whereas Western philosophy allows religious knowledge as a distinct form of knowledge in isolation, Islam only acknowledges the validity of the true faith and confines all knowledge within the parameters of the Qur'an and the *Hadith* (Ashraf, 1984:1-2). The research undertaken in this study strongly suggest that education is always embedded in a specific socio-cultural context. It is in the description of the nature of society and the individual's position within the structure as a whole that the distinction is identified; the uncertainty over values signifies the objections that Muslims have when living under the influence of modern capitalist imperialism (Lemu, 1982:29). Within the context of a family socialization and or education, and even more intentionally in medical schools or health science faculties, there is a noticeable transfer of the dominant interpretation schemes (cognitive, psychomotor and affective) that are considered as "normal" and used by man in his daily cultural relationships with nature, with fellowmen, with himself and with the transcendental.

To operationalize the core curricula in the training of health care professionals in Kuwait it is important to reflect on the relation-axes model, which divides the core curricular into at least four main categories of natural sciences, social

sciences, human sciences, and the religious or moral education [Chapter 2 (Fig. 2.1)]. Each category has its different combination of subject, content, learning activities, skills as well as attitudes to be acquired. For the purpose of comparative analysis, each of the categories is to be examined in terms of its qualification objectives, identification objectives and its social functions.

The **qualification objectives** which refer to modern medical curricula that is enforced in the education of the health care professionals which prepares them for future roles in society. The **identification objectives** which include value, norms, attitude and proper behavior that are regarded as desirable for health care professionals to acquire for participation in social life. The **social functions of education** as perceived by the dominating group(s); political, social, economic, academic or religious, which reflect to a great extent the social needs and national goals of the nation.

(b) Implications

At present there are qualification objectives which include the cognitive, psychomotor and affective domain that have been identified in terms of modern medical educational training. However, it is the **identification objectives** and **social functions** that needs to be operationalized in the core curriculum for the training of health care professionals in Kuwait. The author has attempted to identify those aspects of the relation-axes that are related to qualification objectives, identification objectives and those related to social functions [Chapter 4 (Table 4.1)]. The **ultimate aim of training health care professionals should be dynamic, and inherently flexible in order to accommodate changing needs and circumstances of modern technological progress.**

5.3.2. Recommendation

There must be a deep understanding of the concept of “modernization” and its influence on training health care professionals in Kuwait.

(a) Motivation

It is important to understand that modernization is a dynamic process which produces change. This change is not always beneficial because it brings with it conflict, pain and unpredictable complications. This study warns us that modernization must be thought of as a process that is both creative and destructive, providing new opportunities and prospects at a high cost in human disorientation, human greed, human dislocation and suffering.

When reflecting on the relation-axes, it is clear that medical modernization process is not uni-dimensional and therefore cannot be measured by a single criterion or index. One cannot assume that because a developing country like Kuwait is affluent and has a high standard of living that it is necessarily modern or is becoming modern. **The search for Arabisation of medical education and the need for separation of sexes at tertiary level are clear indications of their need to identify with their culture.**

(b) Implications

Modernization should be viewed as a process involving the interaction of many factors, so that more than one aspect of an individual's behavior must be measured in order to determine his status on the modernization

continuum. Therefore, it is important not to make generalizations but to address the implications of modernization from a multi-variable approach. This has implication for studying complex web of relationships, where the “*Chaos/Complexity Theory and Fuzzy Logic: An escape from post-modernistic impasse?*” (Badenhorst, 1996:1-11) and “*Fuzzy Thinking: the new science of Fuzzy Logic*” (Kosko, 1994) are considered important in **understanding multivalent way of looking at phenomena**. The point of agreement between modern medicine and Islamic medicine, is that Islam encourages the need to improve and further your education from all walks of life, including medical education. In other words Islam does not discourage the use of modern science and modern technology. When comparing Western system of secularism with that of Islam, it is important to understand that Islam cannot recognize any division of life into sacred and profane spheres and that all values in Islam emanate from the teachings of the Qur’an and Prophet Muhammad (P.B.U.H.). The concept of secularism cannot be perceived without the incorporation of these values [Chapter 4 (4.2.4.1)].

5.3.3. Recommendation

It is important to reflect on the sociocultural influences on the training of health care professionals in Kuwait.

(a) Motivation

Kuwait has a comprehensive and well-structured health care system. However, to deliver such medical care the country relies on expatriate medical health care professionals. We are reminded in this study that Kuwait is an affluent and developing country, so the need for commitment to any health profession, especially medical profession, seems to be less attractive, particularly to the male Kuwaitis [Chapter 3 (3.7.5.4)]. However, **Kuwaiti women health care professionals do contribute to a large extent to the needs of the Kuwaiti**

health services. The number of women in the health care professions is increasing substantially each year.

(b) Implications

We are reminded that extensive family responsibilities expected from Kuwaiti women health care professionals do at times cause restrictions on their capacity to improve their qualifications or to provide health services at an optimal level. Moreover, women doctors seem to work fewer weeks per year and interrupt their careers or work part-time more often than their male colleagues. The continuous decline in the number of male Kuwaiti health care professionals is worrying and may have unfavorable effect on the future of the health sector.

If Kuwaiti health services continue to follow: (1) a sex-segregated system of primary health care, (2) with the low number of Kuwaiti male health care professionals, and (3) the traditional trend in the choice of medical specialty of Kuwaiti male and female practitioners, are likely to lead to an imbalance in the future composition and structure of Kuwaiti's public health services [Chapter 3 (3.7.5.4.2) and (3.7.4.5.3)]. This would imply that in order to accommodate future health care needs of the Kuwaiti population, the existing health care services will have to rely on expatriate health care professionals for the foreseeable future.

5.3.4. Recommendation

It is important for Kuwait health care professionals to understand that socioeconomic and educational differences are important in family patterns.

(a) Motivation

When studying the relationship between man and fellowmen in terms of family relations [Chapter 3 (3.7.5.3)], this study reminds us that the Muslim family has been enriched over the centuries. Islam, while abolishing many ancient customs, preserved those it deemed beneficial to the community by the "*Sunnah*" of the Prophet Muhammad; "*kyas*" (making of religious law on the basis of other law), and "*igmaa*" (agreement of all the '*ulamas*.' Since the first century of the *Hegira* (Islamic Calendar), this family has been changing. These changes were negligible until the Second World War. **Through modernization, the contemporary Islamic family finds itself confronting cultural, social, and economic changes linked to the development of the society of which it is a part.** As a result of development and associated change, the extended family system is moving towards the nuclear pattern common in other developed countries. The loosening of family bonds has given rise to a number of social problems such as those involving care of the elderly and an increase in divorce rate.

(b) Implications

Change in the family institutions, especially in the position of women has been evident, partly as a response to Western opinion, but more as a result of political revolution. We are reminded that Kuwait is particularly well suited to an examination of the impact of urbanization and modernization on the family because these processes have moved there with speed and intensity rarely found in other countries.

The situation in Kuwait is culturally ambiguous, and this produces parallel and sometimes contradictory attitudes and behavior patterns. **The conflict between old and new, between tradition and modernity, has made its**

home in the heart of the family. The new has not penetrated enough to triumph, but quite enough to transform its problems altogether.

5.3.5. Recommendation

Health care professionals should be aware of the consequences of changes in the disease patterns accompanying modernization.

(a) Motivation

As modernization is synonymous with urbanization, some of the new problem areas in health have taken on the same pattern that accompanies urbanization. The health status in Kuwait is rapidly changing from that of a developing country to that of a developed country. The changing patterns that have predominated in Kuwait are: an enormous rise in injuries and deaths due to road traffic accidents, hypertension and ischaemic heart diseases, ulcers, stroke, diabetes mellitus, cancer allergies, tension and stress. In addition many of the leading causes of sickness and death result at least in part, from the habits and lifestyle of people. Among these diseases or injury causing habits are excessive smoking, reckless driving, eating excessively and/or imbalance diets, not getting enough exercise, and unhygienic food handling, especially for infants and children.

(b) Implications

Health care professionals need to promote and provide health awareness from a modernistic point of view but at the same time they need to understand the tradition of scientific medicine takes firm roots in Islam [Chapter 3 (3.7.2.2)]. We reminded in this study that Islam's attitude to health and, indeed

medicine, like any other religious teachings, emphasizes cleanliness of body and mind. Performing ablutions as a prerequisite even for ritual prayers, emphasis on wearing clean clothes, regularly cleaning teeth every day, combing hair and using scent are all embedded in the very fundamental ritual teaching. Men are constantly asked to eat and drink of all good things God has created but not to go to excesses, to exercise moderation and not to corrupt the earth [Chapter 3 (3.7.2)]. God reiterates in the Qur'an that the "heavens and earth and whatever is therein has been made subservient to man" to discover for his good ends (S.22:V.65, S.31:V.20, S.45:V.13) and he has been created to serve God's purposes. Both physical and spiritual cleanliness is stressed in the Qur'an and rules are laid down for ablution and bathing (S.8:V.11; S.5:V.41). It is obligatory upon every Muslim to seek nearness to God with whatever means possible by way of service to Him and that he try his utmost to carry out God's commands and ordinances. We are reminded in this study that it was medicine that genuinely touched the center of religious motivation in Islam because it encouraged the most beneficial means and the most helpful services rendered to God, which is to benefit man in preserving his health and in curing his illness.

5.3.6. Recommendation

Health care professionals should have knowledge of the best methods to be used to promote health awareness and prevent environmental pollution.

(a) Motivation

The air pollution caused by the burning of oil fires during the Iraqi invasion of Kuwait has left a deep impression of the tragedy on the environment in Kuwait. The people in Kuwait were exposed to a huge quantity of smoke and

myriad of harmful chemicals which did cause irreversible destruction to humans, animals and plants. Environmental experts and scientist are still trying to determine the extent, effects and scope of the environmental disaster.

(b) Implications

The environmental disaster that has occurred in Kuwait has implication for both modern medicine and Islamic medicine. From a modernistic point of view, health care professionals should promote health awareness and the prevention of environmental pollution by the use of mass media like radio and television, and the computer technology like the Internet. Campaign on environmental awareness should become a yearly exercise to remember the tragedy and to prevent it. **This has clear implications that the health care professionals need to coordinate the efforts of all agencies involved in health and health related activities to have a comprehensive national socio-economic plan.** The management information systems, as well as the health systems organization and management, require strengthening and remodeling to keep abreast of the rapid growth in modern medical sciences.

With reference to the Islamic point of view, the Iraqi invasion of Kuwait is a clear symbol of one Muslim country against another Muslim country out of selfishness, greed and envy. This has implications for Muslims who need to understand what Allah states in the Qur'an: "Let there be no compulsion in religion: Truth stands out clear from error: whoever rejects evil and believes in Allah hath grasped the most trustworthy handhold, that never breaks"(S.2:V.256). We are also reminded in the Qur'an: "Allah is the Protector of those who have faith: From the depths of darkness He will lead them forth into light. Of those who reject faith the patrons are the Evil Ones: from light They will lead them forth into the depth of darkness" (S.2:V.257).

5.3.7. Recommendation

Every step available should be taken to evaluate the impact of premature importation of modern tertiary orientated approach to health care delivery system in Kuwait.

(a) Motivation

The impact of premature importation of a tertiary-care-orientated approach to medical education and health-care delivery is many fold [chapter 4 (4.2.4.2.3)]:

- With the best of intentions, developing countries sometimes attempt to import Western-type medical education and care system although the nations has other, more urgent health-related problems such as safe water, delivery of primary care and promotion of preventive care.
- Modern medical technology and progress in medicine, along with the trend towards a permissive society creating disregard for established moral and ethical values, the present need to clone human beings have and will affected medical health-care practitioners adversely.

(b) Implications

Developing countries like Kuwait, although affluent, needs to address their urgent needs which include the delivery of primary care and the promotion of preventative medicine before superimposing the Western systems of medical education and health care delivery onto their existing traditional patterns.

It is important that various **major religions of the world provide guidance which are yet to be formulated on moral, ethical and religious stands on matters concerning the development of advanced medical technology.** It is important to discuss these issues and incorporate them in the training of health care professionals in Kuwait.

5.3.8. Recommendation

An active role should be undertaken to evaluate the influence of acculturation, culture, cultural identity and core values for training health care professionals in Kuwait.

(a) Motivation

As culture is one of the central variables in the process of modernization, part of chapter two was concerned with analyzing acculturation, culture, cultural identity and core values and the different dimensions of culture in the health care setting.

In the **process of training health care professionals according to the modern medical system, “students undergo a form of ‘enculturation’ whereby gradually they acquire a perspective on ill-health that will last throughout their professional lives”** (Helma, 1990:86). At the same time this study warns us that culture is a set of guidelines (both explicit and implicit) which individuals inherit as members of a particular society, and which tells them how to view the world, how to experience it emotionally, and how to behave in it in relation to other people, to supernatural forces, and to the natural environment. Thus, growing up within any society is a form of enculturation, whereby the individual slowly acquires the “cultural lens” of that society. Without such a shared perception

of the world, both the cohesion and the continuity of any group would be impossible. However, there may be conflict between the “cultural lens” of the modern health care professional training and the “cultural lens” acquired during the rearing process.

Cultural background also has an important influence on many aspects of people’s lives, including their beliefs, behaviors, perceptions, emotions, language, religion, family structure, diet, dress, body image, concepts of space and time, and attitudes to illness, pain and other forms of misfortune, all of which have important implications for health and delivery of health care.

(b) Implications

When comparing different medical systems, this study warns us that medical systems that were historically efficacious in the treatment and management of many health problems, whose success was attributable to the resourceful utilization of indigenous medicinal plant species, have recently undergone a process of medical modernization [Chapter 2 (2.2.2.3)]. The exposure to “Western medicine” has recently intensified through direct health care delivery, the media, the radio, television and tourism which have demonstrated the sociocultural effects on health care through the media and other agencies of acculturation. This study also warns us that in many developing countries, antibiotics can be bought on the open market, while some are counterfeit [Chapter 4 (4.2.4.1.1.a)].

Thus, the introduction of industrialization and penetration of the “industrial mentality” will influence not only the pursuit of cultural equilibrium, that is the ecological, the social, the psycho-somatic, but also the religious view of man, society and man’s role in nature and in the cosmos. These new relations will subsequently change the socialization processes, the quality of cultural transfer, especially through the socializing agents of the

family and the health care delivery system. Therefore, industrialization can be perceived as a relatively new culture, characterized mainly by the “industrial mentality” as explained by Wielemans and Chan (1992:29). What we need to reflect upon is whether developing societies such as Kuwait are critical of their developmental processes and to determine whether they are repeating the history of the West or moving along novel paths.

5.3.9. Recommendation

Health care professionals in Kuwait need to be critical of the modern medical system in terms of the system of health care and the delivery of health care.

(a) Motivation

The critique of modern medicine gives a clear indication that science and modern technology does not have answer to all health related problems [Chapter 2 (2.4)]. We are reminded in this study that the dominant system of health care of any society cannot be studied in isolation from the other aspects of that society because the “**medical system**” **does not operate in a social or cultural vacuum**. In addition “core values” are singled out for special attention because they provide the indispensable link between the group’s culture and social system, in their absence both systems would suffer disintegration. It is through core values that social groups can be identified as distinctive ethnic, religious, scientific or other cultural communities sharing similar values that creates solidarity among members of the same group as well as between different groups.

In Chapter Three we examined health and illness in context with particular reference to Islamic medicine, more specifically Kuwait, and its implications

for training health care professionals. The **sociocultural influence on the training of health care professionals in Kuwait** was highlighted with specific reference to problems of training health care professionals in Kuwait: (1) **need for segregation of sexes**, (2) **Arabisation of medical education**, and (3) **the concept of health which means different things to different cultures**. We noted in this study that the major concern of a developing country like Kuwait is to transfer their traditional premodern health care and societies into sophisticated health care systems and social organizations that characterize the “advanced” and economic prosperous nations of the Western world. This process is identified by social scientists as modernization and is most commonly approached in terms of economic growth stimulated by recent technology (Berger, *et al*, 1973:8-9; and Moore, 1974:94). At the same time this study warns us of the many problems encountered in Kuwait during this modernization process [Chapter 4 (4.2.4.2.3) and (4.2.4.3.1)].

(b) Implications

When we reflect on **technology**, we note that it too is a **social product** that **can influence the culture and traditions of people** [Chapter 4 (4.2.1.1)]. It is the broader meanings related to the term technology that reflect the effects of “industrial mentality” on the health care and social institutions of developing societies such as Kuwait. These institutions are being transformed and reshaped by the “primary carriers” of modernization: technology and bureaucracy, and its “secondary carriers,” such as mass education and urbanization. Although technology has transformed to a greater or lesser extent the living conditions in developing societies like Kuwait, Hammoud (1986:53) warns us that **“technology does not operate in a cultural and social vacuum.”**

5.3.10. Recommendation

All Islamic countries including Kuwait need to address Islamic medicine in the light of the Qur'an and the *Sunnah* of the Prophet to understand and eradicate contemporary problems facing modern society today.

(a) Motivation

The contribution of the Arabs to the progress of medicine was achieved both by historical and cultural factors. The historical factors may be summed up by a succession of important events. After the *hijra* of the Prophet Muhammad (P.B.U.H.) from Mecca to Medina, ten years before his death in 632 AD, the Muslim empire was gradually being formed, encompassing respectively Syria, Mesopotamia (from 635 to 640 AD), Egypt, and Persia (642 AD), and stretching eastwards as far as the shores of the Indus. The tenth century probably marks the zenith of the power and glory of the Muslim Empire (as quoted by Al-Sabah, 1984:74).

The decadence of Arab scientific civilization began towards the end of the twelfth century. As Islam entered the modern era, its history provided it with a wide range of political alternatives and theoretical justifications, to the extent that "it is difficult to find an Islamic state that has enforced the *Shari'a* totally and faithfully" (Forte, 1984:162).

(b) Implications

The Qur'an is not a book of science, but it is a religious book, *par excellence*. The Purpose of the Qur'an is to invite man to reflect upon the natural phenomena whether it be man and himself; man and fellowmen;

man and nature; or man and the transcendental; and to stress Divine Omnipotence.

When mankind was in the depth of darkness, God sent the final Messenger, Prophet Muhammad (P.B.U.H.) to redeem humanity. The revelation to Prophet Muhammad (P.B.U.H.) represents the ultimate and permanent source of guidance for mankind. Bucaille in his quest for the truth, stated: "Since God is the creator of all knowledge, true revelation is scientific and can withstand the challenge of science at all times" (Bucaille, 1976:20). A specific example he quotes, is the remarkable technological progress which has resulted in man's journey to the Moon. Here he quotes the Qur'an, sura *Al Rahman* (S. 55: V.33) "O assembly of *jinns* and men, if you can penetrate regions of the heavens and the earth, then penetrate them! You will not penetrate them save with [our] Power." He concludes by saying, "this power comes from the All-Mighty, and the subject of the whole *sura* is an invitation to recognize God's Beneficence to man" (Bucaille, 1976:8-9). This modern scientific information should be reflected upon, to understand God's gifts whose value must shine out in an age where scientifically based materialistic atheism ("industrial mentality") seems to gain control at the expense of the belief in God. Islam has answers to contemporary psychological problems that trouble mankind today, such as anxiety, depression, stress, lack of confidence, addiction, etc. **In direct contrast to the Western focus on the "self," Islam tells us to look beyond ourselves and focus on Allah.** By doing so, we will move towards fulfilling the purpose for which we were created, and thus attain peace with our Creator and within ourselves (Al-Khattab, 1997:3).

5.3.11. Recommendation

Health educators in Kuwait should incorporate the spiritual dimension of health in their professional training program.

(a) Motivation

This study also focused on the cosmopolitan nature of the Islamic civilization and that it is a genuine precursor of the modern civilization. The reflection on the history of medical education in Islam has clear connotation for the decline in Islamic medicine with the rise and fall of nations but this does not imply that Islam per se has declined. The misunderstanding of the concept of Islam is clearly demonstrated in the media and the threat of the Western world towards this force is acknowledged by the day. The author finds it difficult to conceptualize the differences and increase in the divisions among the three most notable Monotheistic religions which are based on Abrahamic faiths being Islam, Christianity, and Judaism. In this 21st century with such sophisticated technology like the mass media we have failed to comprehend the commonality in the understanding of the concept of God and the spiritual dimensions in health care.

(b) Implications

The author would like to share her experience when attending the World Confederation of Physical Therapy in Washington DC during June 1995 where the theme was **“Cultural Diversity in Health Care”** and the reflections made by the spokeswomen during the closing ceremony where she commented that we should be addressing **“Universal Commonality”** instead of **“Cultural Diversity.”** One of the ways of addressing the

Universal Commonality is by addressing the spiritual dimensions in health care. Although, Stark and Bainbridge (1985) in their book "The Future of Religion" have been criticized by authors such as Wallis and Bruce (1984) in their article "The Stark-Bainbridge theory of religion: a critical analysis and counter-proposals," the observation that "secularization does not lead to the disappearance of religion; it is the mechanism by which religion is maintained" (Stark and Bainbridge, 1985 as quoted by Bull, 1990:250) has implication that **scientific research can contribute to the significance of spiritual dimensions in health care.** Also data from a study conducted by Banks (1980:195-202) in her article "Health and the Spiritual Dimension: Relationships and Implications for Professional Preparation Programs," indicated that the majority of health educators surveyed believe there is a spiritual dimension of health and that this dimension should be included in the health education professional preparation program (Banks, 1980:199).

5.3.12. Recommendation

With the decline of patriarchy, we need to address the role of Kuwaiti women in the modernization process.

(a) Motivation

The power of patriarchy has been extremely difficult to understand because it is all-pervasive [Chapter 2 (2.1)]. It has influenced our most basic ideas about human nature and about our relation to the universe. It is the one system which, until recently, had never in recorded history been openly challenged, and whose doctrines were so universally accepted that they seemed to be laws of nature; indeed they were usually presented as such. Today, the disintegration of patriarchy is in sight with the introduction of

feminist movements which is one of the strongest cultural currents of our time and will have a profound effect on our further evolution.

Because feminism is a major force in our cultural transformation, especially in North America and Europe, it is likely that the women's movement will play a pivotal role in the coalescence of various social movements. Women are already playing important roles in contacts among environmental groups, consumer groups, ethnic liberation movements, and feminist organizations. Helen Caldicott, who has helped to provide the antinuclear movement with a sound basis, as well as a sense of urgency and compassion, and Hazel Henderson, who has lucidly analyzed the shortcomings of the Cartesian framework in current economic thinking, are examples of women in leading positions who are forging valuable coalitions (Capra, 1982:464-465).

The new alliances and coalitions, which already interlink hundreds of groups and networks, aim to be nonhierarchical, nonbureaucratic, and nonviolent. Some of them function very effectively around the world. An example of such a world-wide coalition is Amnesty International's great campaign for human rights. The question is, is the answer to women's plight in human rights? In other words, if majority of women vote for accepting lesbianism, should this be allowed?

It is when we begin to move away from the Divine Law, that classification of groups develop on the basis of why people join them such as: one-parent families, Lesbian Line, Gay Switchboards, Phobics Society, Parent Anonymous, Social isolation and Women's group [Chapter 2 (2.3.3.1.1.a)]. This is the real cause of the cyclic nature of human problems.

The situation of women in a developing country such as Kuwait with its "Westernization" and "modernization" influence is more likely to worsen than to improve. This is in part a consequence of capitalist development and in part a consequence of the diffusion of "Western" attitude and practices regarding

gender relations; whether or not the two are necessarily linked, they have historically gone hand in hand in the developing world.

(b) Implications

In the light of the above, it is not surprising that prescriptions for the liberation of women in the Third World countries such as Kuwait have been greeted with great skepticism. Thus, it is important to examine alternative strategies of addressing the women's plight in a developing country like Kuwait.

In view of the need for Islamic values and social practices in the Islamic societies, the degree of variety and flexibility in the Islamic traditions and the hostility to Western influence in many areas, it is **not surprising that a number of feminists have sought a way forward within the Islamic tradition rather than through its rejection.**

Islam has its own rigorous criteria for legitimate government. The first of these is that the government is accountable to God, Who is the Sovereign Lawgiver and the primary source of the *Shari'ah*. This implies that the government's authority is limited and not absolute. The government must itself abide by the *Shari'ah* and do all it can to ensure its fulfillment. The Qur'an leaves no doubt about this by stressing: "Follow that which has been sent to you by your Lord, and follow not authorities other than Him" (S.7:V.3), and that "those who do not rule in accordance with what God has sent are transgressors"(S.5:V.45).

The government cannot fulfill its role of realizing the people's aspiration effectively unless it is open to their suggestions and criticism. Hence, the Prophet Muhammad (P.B.U.H.), emphasized that one of the demands of faith on Muslims is that they render sincere advice to their rulers, advice that would help the rulers perform their duties effectively. But how can

the people fulfill this obligation if there is no freedom of expression and they are not allowed to criticize the policies being pursued by the government? Unless the rulers consider themselves accountable to the people and are willing to get feedback from them, there can be no reform. Accordingly, when Abu Bakr became the first *caliph*, he categorically emphasized this Islamic imperative in his inaugural address by saying: "O people, I have been elected your leader, although I am not better than anyone from among you. If I act rightly, help me, but if I act wrongly, correct me and set me right. Listen, truth is honesty and untruth is dishonesty" (Ahmad, 1990:38). It is important to note that the person in power should be approachable to exercise this type of relationship.

There is a whole chapter in the Qur'an (*Surah 4. An-Nisa*) which is specifically related to women, their rights, obligations in matters concerning marriage, obligatory bridal-money, women who are orphans, women who are widows, divorce and other aspects of life. What is important to realize that Islam does not propose any "magic" formula or mechanism or strategy for solving the universal problems. As any claims about the "magic" properties of any mechanism indicate a lack of realization of the complexities of the human society, and the difficulties in harmonizing individual and social interests and realizing social goals.

Islam is more realistic. It appreciates the difficulties involved in solving problems arising from scarcity and emphasizes the need for a strategy consisting of a package of tools, all in harmony with the worldview. In the absence of such a comprehensive approach there cannot be an effective strategy.

5.3.13. Recommendation

Health care professionals from different cultures need to understand that the “concept of health” means different things to different people.

(a) Motivation

Health is really a multidimensional phenomenon involving interdependent physical, psychological, social and spiritual aspects. Also that the concept of health means different things to different people. The common representation of health and illness as opposite ends of a one-dimensional continuum is quite misleading. According to Islam, Allah says in the Qur’an (2:216), “There may be a thing decreed for you that you do not like that is good for you; and things that you like that are not good for you.” The great Sufi Imam al-Ghazzali (as quoted by Moinuddin, 1985:11) expressed this idea as follows: “**Illness is one of the forms of experience by which humans arrive at a knowledge of God; as He says, ‘Illness are my servants which I attach to My chosen friends.’**” The question of legitimacy of the spiritual dimension in health has long been debated by health care professionals, and a trend to develop and affirm its existence currently exists in the health care system of training [Chapter 3 (3.7.6)]. Islam’s attitude to health is described in chapter 3 (3.7.6.8.), unfortunately, Man’s moral powers have “not to date proven commensurate with his cognitive gifts for he has not yet fulfilled the (primordial) Divine Commands” (LXXX, 23) and not discharged the “trust” which he had voluntarily undertaken in pre-eternity after it had been refused by the entirety of the rest of the creation, for all were frightened of the responsibility it involved (XXXIII, 72).

(b) Implications

Man needs to be constantly morally alert, to ever search his conscience and not to be misled by the demands made upon him from the modernization process, "industrial mentality," and most especially self-deception. It is interesting to reflect on the fact that God created man "in the best of molds," yet man degrades himself to the lowest of the low. Peace and prosperity are among the most precious blessings of the Lord (*Sura CVI*), yet man seems incapable of managing them well, abuses them and particularly abuses the power generated by them. This theme is persistent through the Qur'an, and is the main reason given by the Qur'an, to explain the fall and extinction of societies. The remedy that the Qur'an proposes is gratitude to God, which alone will break man's selfishness and narrow vision of the world, for only through God can man transcend his limitations. *Iman* (belief) is in two halves: half is patience (*sabr*) and half is gratitude (*shukr*) (Al-Khattab, 1997:55). Therefore, Allah has mentioned patience and gratitude alongside one another: "...Verily in this are signs for all who constantly persevere and give thanks" (S.14:V.5; S.31:V.31; S.34:V.19; S.42:V.33). *Iman* (belief) is based on two pillars, *yaqin* (conviction) and patience. It is through faith that we know the reality of Allah's commands and prohibitions, of reward and punishments, and it is through patience that we carry out His instructions and abstain from that which He has prohibited. A person can never come to believe in Allah's commands and prohibitions, and in reward and punishment, except through faith, and that is truly from Allah (Al-Khattab, 1997:55).

5.3.14. Recommendation

Health care professionals need promote preventive care in the health care system in Kuwait.

(a) Motivation

A future system of health care will consist, first and foremost, of a comprehensive, effective, and well-integrated system of preventive care. Health maintenance will be **partly an individual matter and partly a collective matter**, and most of the time the two will be closely interrelated. Individual health care is based on the recognition that the health of human beings is determined, above all, by their behavior, their food, and the nature of their environment (Capra, 1982:365). As individuals, we have the power and the responsibility to keep our organism in balance by observing a number of simple rules of behavior relating to sleep, food, exercise, and drugs. The role of health care professionals is to assist individuals in doing so. In the past this kind of preventive health care has been severely neglected in our society, but recently there has been a significant shift in attitudes that has generated a powerful grass-roots movement promoting healthy living habits - whole foods, physical exercise, home births, relaxation and meditation techniques - and emphasizing personal responsibility for health (Capra, 1982:365).

(b) Implications

If acceptance of individual responsibility will be crucial to a future system of holistic health care, it will be equally crucial to recognize that this responsibility is subject to severe constraints. Individuals can be held responsible only to the extent that they have the freedom to look after

themselves, and this freedom is often curtailed by heavy social and cultural conditioning (Capra, 1982:365). Moreover, many health problems arise from economic and political factors that can be modified only by collective action. **Individual responsibility has to be accompanied by social responsibility, and individual health care by social actions and policies.** 'Social health care,' seems an appropriate term for policies and collective activities dedicated to the maintenance and improvement of health.

Social health care will have two basic parts, health education and health policies, to be pursued simultaneously and in close coordination. The aim of health education will be to make people understand how their behavior and their environment affect their health, and to teach them how to cope with stress in their daily lives. These issues should be discussed and incorporated into the training of health care professionals.

5.3.15. Recommendation

Health care professionals need to reassess their models for human development and well-being and providers of health care.

(a) Motivation

In the introductory orientation Chapter 1 (1.1), mention was made of the threat to the human race which results from the countries that have stockpiled tens of thousands of nuclear weapons which are enough to destroy the entire world several times over. Thousands of tons of toxic materials have already been discharged into the environment by nuclear explosions and reactor spills. As they continue to accumulate in the air we breathe, the food we eat, and the water we drink, our risk of developing

cancer and genetic diseases continues to increase. Concomitant with this collective nuclear madness, more than a hundred countries, most in the Third World, are in the business of buying arms. In the meantime more than fifteen million people, most of whom are children die of starvation each year; another 500 million are seriously undernourished. Almost forty percent of the world's population has no access to professional health services, yet developing countries spend more than three times as much on armaments as on health care. Thirty five percent of humanity lacks safe drinking water, while half of its scientists and engineers are engaged in technology of making weapons (Capra, 1982:2-3).

(b) Implications

Recent emphasis on health and well being especially for life threatening illness and psychosomatic illness related to social ills for which there is no cure for the moment, there is increased emphasis on establishment of a new program to explore the possibility of traditional medicine functioning in conjunction with modern medicine to establish a holistic approach to patient care (Elling, 1981; Fulder, 1986; and Akerele, 1986).

When comparing Western system of secularism with that of Islam, it is important to understand that Islam cannot recognize any division of life into sacred and profane spheres and that all values in Islam emanate from the teachings of the Qur'an and the *Sunnah* of Prophet Muhammad (P.B.U.H.). However, the secularizing trends have strongly influenced Muslim societies in various ways since the impact of the Western influence upon them, and the modern medical profession in these societies has had a fare share of it, nevertheless, these societies are still in transition and the current resurgence of Islam is primarily a reaction to this penetrating secularism (Rahman, 1982:77)

According to Islamic medicine, the performance of modern medicine will be evaluated according to its ability to save life, to eradicate or control disease, and to improve personal well-being . The relation of Islam to medicine is a formulation of the greater truth which governs Islam's view of man. For man in the Holy Qur'an is God's representative on earth. He is creature honored by God who commanded the angels to bow down to him. He has appointed the earth for him to build upon and to cultivate. This paramount value assigned to man has entailed the raising of an array of guarantees which Qur'anic verses and traditions of the Prophet have confirmed to such an extent that **any hostility to man is aggression against society as a whole.**

5.3.16. Recommendation

Health care professionals in Kuwait need to understand that medical education is a vehicle of modernization in a Third World country such as Kuwait

(a) Motivation

We noted that medical education in the West is "rigidly resistant to change," although, it is doing better, it is feeling worse [Chapter 4, (4.2.4.2.1)]. In the past century, modern medical education is well designed to incorporate and convey new scientific information while "preserving intact its own institutional structure" (Gallagher, 1988a:388). Although, it is close to the scientific laboratories that are the engines of modern biomedicine, medical education in itself is not seen as flexible, much less as a vehicle of modernization that touches and changes other parts of society.

In contrast to **modern medicine in Third World societies such as Kuwait**, along with other domains of higher education, **“is a vehicle of modernization”** (Gallagher, 1988a:388). It removes most students residentially, for the first time in their lives, from the protective confines of a traditional family system. Academically it exposes them to “universalistic expectations for learning that is charged with symbolic modernity of science and technology” (Gallagher, 1988a:388). It points them occupationally towards a professional career that has little relations to traditional modes of livelihood. Also, the traditional proprieties of relations between the sexes is very strong in Third World societies like Kuwait, which are strained when male and female students are exposed to each other, and to faculty and patients in diverse situations of medical care. For these reasons medical education is an uprooting experience even for students who originate in the more modernized segments of their society, and it bears the imprint of modernization.

(b) Implications

The Kuwaiti students do face historically unique, often stressful situations that may become the carriers of new patterns of relationship and consciousness in the society. The process of modernization can lead to the adaptation of a different “cultural lens” that the students may acquire eventually. This may lead to the difficulty of transferring the expected “cultural lens” to the next generation.

The establishment of the Health Science Center for medical education is a massive stimulus for modernization of a traditional culture such as Kuwait, this is well demonstrated by the need for Arabisation of medical education and the need for segregation of sexes at tertiary level.

It is important to understand that Arab culture should not be confused with Islamic culture. According to Prophet Muhammad (P.B.U.H.): “Whoever goes

out seeking knowledge, he will be in the way of God until he returns” (Ashry, 1988:50).

Health care professionals in Kuwait should understand the concept of “industrial mentality” as it is related to economy, and technology, and it is as much a key variant in the Third world as it is in the advanced industrial societies. No where is this phenomenon more profound than in the delivery of health care which affects every human being sometime during their life. It is in this sphere that societies will express commonality in the perception of the world and where the question of social justice in health care is addressed.

Those concerned with training health care professionals should acknowledge that the medical model does not and should not be perceived as the only scientific model with the concept of “mind-body dualism.” The spiritual issues in health care should be addressed by social scientists and scientists concerned with training of health care professionals in view that man is a vicegerent on this earth who’s powers do not surpass that of the Creator.

Awareness of the earth as alive, which played an important role in our cultural past, was dramatically revived when astronauts were able, for the first time in human history, to look to our planet from outer space. “Their perception of the planet in all its shining beauty - a blue and white globe floating in the deep darkness of space - moved them deeply and, as many of them have since declared, was a profound spiritual experience that forever changed their relationship to the earth” (Capra, 1982:307). The magnificent photographs of the “whole earth” which these astronauts brought back became a powerful new symbol for the ecology movement and may well be the most significant result of the whole space program.

5.3.17. Recommendation

Health care professionals in Kuwait need to recognize the cosmopolitan character of the Islamic Civilization which is the genuine precursor of the modern civilizations.

(a) Motivation

It is also interesting to note that “the main language in which medical, scientific, and philosophical works were written was Arabic. For these reasons, this entire medical literature is known as ‘Islamic medicine,’” even though the very early carriers of scientific medicine in Islam were Christians, Jews, and Zoroastrians; even in later centuries many belonged to these faiths (Rahman, 1984:595). Islam generated a comprehensive civilization, it was broad and tolerant enough to cut across boundaries of race, color, and faith. This contrast with the situation in the modern West, where scientific development cannot be attributed to the Christian or Jewish faiths but to the growth of a secular mind that sharply distinguishes between a “private faith” on the one hand and a “temporal” life on the other - a dichotomy unknown to Islam (Rahman, 1984:595).

(b) Implications

An important dimension often overlooked or insufficiently appreciated by historians of Islam is the impact of the cosmopolitan nature of the Islamic civilization and culture on the development of science and medicine, especially on the latter. It has been noted recently by social scientists that Islam is capable of living and thriving in diverse cultures from the shore of the Atlantic, across Central Asia and the subcontinent, to Indonesia. Islamic civilization is an international and global civilization where

different nations, races, and people are able to embrace Islam within their own cultural context. Never before has there been such a systematic and fruitful cooperation on a large scale among diverse segments of humanity in science, medicine, and philosophy. In this respect, then, the civilization of Islam was the genuine precursor of the modern civilizations.

5.3.18. Recommendation

There is a message to all those who maybe suffering from incurable diseases, that there is a meaning and purpose in life for those who reflect.

(a) Motivation

Asad (1984:4) explains the concept of spiritual dimension as *Al-ghayb* (commonly, and erroneously translated as the "Unseen") is used in the Qur'an to denote all those sectors or phases of reality which lie beyond the range of human perceptions and cannot, therefore, be proved or disproved by scientific observation or even adequately comprised within the accepted categories of speculative thought: as for instance, the existence of God and a definite purpose underlying the Universe, life after death, the real nature of time, the existence of spiritual forces and their inter-action, and so forth. According to the Qur'an (S.2:V.4), "those who believe in the Qur'an and the *Sunnah* which has been sent down to Prophet Muhammad (P.B.U.H.) and in the Torah and the Gospel, and other revealed books which were sent down before Muhammad and those who believed with certainty in the hereafter," only a person who is convinced that the ultimate reality comprises far more than our *observable* environment can attain to belief in God and, thus, to a belief that life has meaning and purpose: By pointing out that it is "a guidance for those who believe in the existence of that which is beyond

human perception,” the Qur’an says, in effect, that it will - of necessity - remain a closed book to all whose minds cannot accept this fundamental premise.

(b) Implications

A reference to the natural law instituted by God, whereby a person who persistently adheres to false beliefs and refuses to listen to the voice of truth gradually loses the ability to perceive the truth, so that finally, as it were, a seal is set upon his heart (Qur’an, S.2:V.6). Since it is God who has instituted all laws of nature, which, in their aggregate are called *sunnat Allah* (“the way of God”) - this “sealing” is attributed to Him: but it is obviously a consequence of man’s free choice and not an act of “predestination.” Similarly, the suffering which in the life to come, is in store for those who during their life in this world have willfully remained deaf and blind to the truth, is a natural consequence of their free choice - just as happiness in the life to come is the natural consequence of man’s endeavor to attain to righteousness and inner illumination. It is in this sense that the “Islamic Medicine” in the Qur’anic references to God’s “reward” and “punishments” must be understood.

Also, we are reminded that it is through the acquisition of more knowledge, investigation, and research that we may come to realize the existence of One God, His attributes and truthfulness of His Books. God says in the Qur’an “We shall show them Our Signs in the horizons and within themselves until it becomes manifest to them that, it is the truth” (Qur’an, S.41:V.53). The Qur’an has many parables in it which has connotations for all living problems on this planet. It is for the individual to learn, read, understand and extract the healing from within it. **The process of extracting the healing properties from within the Qur’an, is Islamic medicine.**

5.3.19. Recommendation

Kuwaiti's need to establish which reaction and response is most likely to be pursued in the modernization process.

(a) Motivation

There are different reactions and responses to the new and unfamiliar forces of change in the process of modernizing Kuwaiti society. At the one end of the spectrum there are those who support the idea that if Kuwait is going to adopt any of the fundamental educational structures of the so called "developed societies," it should go all the way and adopt its value system as well. At the other spectrum are the so called "conservative and reactionary" people of the society who say that whatever is foreign is undesirable and should be resisted implacably. Between these two extremes, there is a moderate Kuwaiti believe that to keep abreast of knowledge is a fundamental right, however, this does not mean that one has to sacrifice one's own values, traditions and heritage for acknowledging growth in many directions. In fact the new growth should demonstrate a unique character and identity within the Kuwaiti society.

The **influence of modernization of medical education** has many variables to it. There is a need for **"Arabization of medical education"** and **segregation of sexes at tertiary level** which has clear implications for the influence of cultural identity. The influence of "industrial mentality" can be identified with the need to introduce medical insurance. The bureaucracy is demonstrated in many forms, one of which is related to social injustice for **introducing medical insurance for only expatriate population**. The executive and legislative authorities have finalized the final draft of the proposed health insurance law for expatriates and both sides have agreed on the details of the proposal. The sources affirmed that the proposal stipulates

that an *iqama* will not be issued until after the insurance policy is obtained, and this rule will be implemented when the *iqama* is up for renewal (Kuwait Times, 4th December 1997:1)

(b) Implications

It is important to establish which reactions and responses are going to be dominated in the process of modernizing Kuwaiti society. Wielemans and Chan (1992:34) warn us regarding the dominance relationship:

1. If the dominant groups give priority to industrialization, then gradually both the culture and the core curriculum will be dominated by the industrial mentality.
2. If the dominant groups give priority to preserving the cultural heritage, there would be a conflict between the introduction of the industrial mentality and core values of the culture as the former is seen as a threat to replace the cultural values. As a result, the core curriculum would be used to inculcate the cultural values and for the purpose of transmitting culture.
3. If the dominant groups place equal priority on both industrialization and cultural transmission, the core curriculum will reflect a balanced compromise.

When reflecting on these observations, the level of control of education by whom would clarify the conflict/contradiction or harmony in the core curriculum of any education. This thesis indicates that the dominant group in Kuwait is giving priority to the second observation because of the need for Arabization of medical education and segregation of sexes at tertiary level. At the same time we are able to detect the first observation with reference to "industrial mentality," in the need to introduce health insurance proposal for expatriate population. If the dominant groups place equal priority on both industrialization and cultural transmission, the core curriculum will reflect a balanced compromise.

In the author's opinion, it is important for Kuwaitis to take the moderate view (third observation), which believes that to keep abreast of knowledge is a fundamental right, however, this does not mean that one has to sacrifice one's own values, traditions and heritage for acknowledging growth in many directions. In fact the new growth should demonstrate a unique character and identity within the Kuwaiti society. This would illustrate the interdependence relationship of industrialization, culture and education as having a balanced compromise when a developing country like Kuwait attempts to adopt "Western" science and technology while preserving their Kuwaiti values and cultural assets through the educational process.

5.4 CONCLUSION

This study clearly demonstrates that the training of health care professionals in Kuwait is according to the secular system of modern medicine. At the same time we notice that there is within the Kuwaiti community an extension of Islamic medicine which is in practice but is quite isolated from the modern medical system of education. This study warns us that as modern medical treatments grow more complicated and health care system increases in complexity - patient care can become fragmented and impersonal. Although advances in medical technology and increased efficiency in the delivery of services are associated with more positive physical prognoses and improved quality of care, they can also lead to a widening gap between the health care providers and recipients of service.

This study clearly indicates that "industrial mentality" and the influence of culture is operating at all phases in the complex web of relations between man and himself, man and fellowmen, men and nature and even in the sphere of men and the transcendental when training of health care professionals.

It is important to understand “cultural diversity” in health planning as it is important to understand “universal commonality” in the delivery of health care. The concept of modernization and its relation to “industrial mentality” and its influence on training health care professional in a developing country such as Kuwait should be appreciated by health care professionals who are involved with training such students. Most of all it is important to address the spiritual dimension in health care, to appreciate the problems in solving questions related to terminal illnesses for which there is no cure for the moment.

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GLOSSARY OF MEDICAL TERMS

Abortion - Is an obstetrical emergency synonymous with miscarriage, which is the spontaneous evacuation of the pregnant uterus before the fetus is viable, that is, before it is able to live independently of its mother, which is before the 28th week. After this date evacuation of the uterus is a premature labour.

Acupuncture - Means puncturing the skin, which is carried out locally for the relief of pain by insertion of small needles.

AIDS - Acquired immune deficiency syndrome.

Antibiotics - Are chemical substances produced by a fungus or bacterium which interfere with the growth of other organisms. These substances may exert a bacteriostatic action and so prevent growth and/or they may, acting as bactericides, actually destroy organisms.

Anxiety State - A state of mental conflict. Anxiety states are characterized by fear and anxiety.

Arthroplasty - Plastic surgery applied to joints.

Asthma - Is a condition in which intermittent bronchial spasm gives rise to attacks of expiratory dyspnoea.

B.C.G. or Bacillus Calmette Guerin - is a vaccine named after two physicians who prepared it from an attenuated strain of bovine tubercle bacillus for use as protection from tuberculosis.

Behavioral Medicine - The application of the principles of learning and learning theory to treat those disorders, caused at least in part by psychological factors as if they were behaviours.

Bell's Palsy - Is paralysis of the seventh cranial nerve which supplies the muscles of expression of the face.

Cancer - is a malignant process which is the cause of an increasing number of deaths every year throughout the world, yet it is a disease which can be cured if detected in time. Little is known of the cause; a number of agents some chemical, some biological and other physical are thought to produce cancer.

Cardiac Surgery - Is the surgical treatment of the diseases and abnormalities of the heart and its great vessels.

Care of the Elderly - The elderly form one of the most vulnerable groups in our modern society and require special care and understanding.

Cerebral Palsy - Sometimes called 'infantile cerebral palsy', is caused by damage to the brain, either before birth, during birth or during the post-natal period.

Chemotherapy - The use of special drugs to treat infection. Example, Quinine in the treatment of malaria.

Chickenpox - Chickenpox or varicellais a highly communicable disease usually affecting children, though it may occur at any age.

Cholera - Cholera is an acute epidemic tropical disease due to the vibrio cholera or comma bacillus.

Clinical Medicine - Medical practice or instruction involving and based on direct observation of patients as opposed to the theoretical study, laboratory investigations, or classroom teaching.

Communicable disease - That can be passed from one person to another, as a disease.

Community Medicine - The practice of medicine, or study of health care services focusing on community needs and care rather than on the individual.

Death - comes to us all. It may be hard but this is rare, as death is generally peaceful and easy. Many people do not know that they are dying. Understanding and thoughtfulness by health care professionals may contribute greatly to the peace of mind of a dying patient and can mitigate the distress of relatives and friends.

Diabetes Mellitus - Diabetes is a constitutional disease in which carbohydrate metabolism is defective.

Domestic Medicine - The treatment of illness or injury in the home without the advice or assistance of a physician.

Dosimetric Medicine - The administration of drugs or medicine by an exact and standardized system of dosages.

Dysentery - The term dysentery is applied to many diseases characterized by diarrhea with blood and mucus present in the stools.

Dysmenorrhoea - Painful menstruation.

Environmental Medicine - The study of the environmental aspects related to the etiology and prevention of disease as well as specific environmental aspects of the promotion of good health.

Episiotomy - An incision made into the vulval orifice as the head of the baby is advancing onto the perineum in labour in order to enlarge it. A local anaesthetic is employed, and just as the mother is pressing down, the vulva is incised, and the child is born.

Equity - Fairness, justice: Say among the nations, "The Lord reign", He will judge the peoples with equity (Psalm 96:10).

Erb's Palsy - Is a paralysis of some of the muscles of the shoulder and arm, resulting in adduction of the arm and pronation of the hand which may occur as the result of injury to the shoulder during a breech delivery.

Euthanasia - A panel of physicians has produced, for the British Association, a memorandum, 'The problem of Euthanasia'. It draws a sharp distinction between the true meaning of the word derived from the original Greek - a peaceful easy death - and the use of the term for deliberate termination of the life of a person suffering from a distressing and incurable illness. In this latter sense euthanasia means killing, *albeit* with the agreement of the person concerned.

Folk Medicine - The treatment of illness or injury based on tradition, especially an oral tradition passed from one generation to the next, rather than on scientific practice.

Forensic Medicine - The application of theoretical and practical medical knowledge and skill to the solution of problems encountered in the administration of justice.

Genu Varum - Bow legs.

Genu Valgum - Knock Knee

Hippocratic Oath - Hippocrates was a famous Greek physician who lived from 460 to 375 BC called 'the Father of Medicine'. He extracted an oath from his students, called the Hippocratic Oath, to the effect that they would not betray the trust or confidences their patients placed in them, nor abuse their profession by criminal practice.

Holistic Medicine - An approach to health care based on the theory that health is the result of harmony between body, mind, and spirit and that stress of any kind, including physical, psychological, and social pressure, is inimical to health. Also at times referred to as whole person medicine.

Hypertension - This term means high blood pressure, and is used when both diastolic and systolic pressure are affected.

Jaundice - is a discoloration of the skin and sclera due to excessive bilirubin in the blood.

Malaria - is an infectious disease caused by protozoan parasites carried by anopheles mosquitoes, which whilst sucking the blood of their host inject the parasite into his blood stream.

Malnutrition - Poor nutritional state due to insufficient food, to lack of a balanced diet, or to some condition of the body which prevents assimilation of the food.

Materia Medica - is the branch of medicine which deals with the study of the sources, preparations and uses of drugs.

Menopause - more frequently called, 'the change of life', occur in most women between the ages of 45 and 50, though it may be earlier or later.

Menstruation - The onset of menstruation marks the threshold of womanhood when changes take place in the reproductive organs.

Nostalgia - A longing for; in the past.

Orthopaedic - The word is derived from two Greek words, meaning 'straight child'. Orthopaedic surgery is concerned however not only with the correction of deformities, but also with many other diseases and injuries of the trunk and limbs.

Osteoporosis - is one of the metabolic diseases on bones which are deficient in calcium, rendering them, particularly the vertebrae, increasingly porous. There is decrease in height, and deformities and sometimes fractures, result from weight-bearing.

Pandemic - Of a disease, e.g., occurring over a wide area and affecting a large number of people.

Parkinsonian syndrome, also known as shaking palsy or paralysis agitans, is a disease of the basal ganglia deep in the substance of the brain that control

movement. It occurs usually in late middle age, begins gradually and is progressive in its course.

Physical Therapy - is the management of disease by such means as heat therapy, cryotherapy, massage, passive movement, exercise, hydrotherapy, electrotherapy, etc.

Placebo - From the Latin word meaning to please, describe a medicine which is given to satisfy the patient rather than cure his disease. The word is also used in comparative trials of drugs. One group of persons is given the drug under trial, while a similar group, the 'control', receives only an innocuous substance - a placebo.

Plague - Plague is conveyed to man by the rat flea which has lived on plague - infected rats and by droplet infection, infected patients with pneumonic plague.

Plastic Surgery - Is reconstruction, example skin grafting and in reconstructive operations when contractures and deformities have arisen.

Pneumonia - Means inflammation of lungs.

Poliomyelitis - Acute, formerly known as infantile paralysis, is a communicable disease due to several types of 'polio' virus. It is characterized by inflammatory lesions in the grey matter of the anterior horns of the spinal cord destroying some cells and damaging others, the cranial nerves also may be affected.

Preventive Medicine - The branch of medicine concerned with the prevention of disease, injury, and disability, and with the promotion of safety and of practices aimed at lessening the probability of disease, with regard to individuals and whole populations, as distinguished from remedial or curative measures.

Psychiatry - The branch of medicine which deals with disorders of the mind.

Psychosomatic Medicine - The study of body - mind relationship has made rapid strides in recent years and the term psychosomatic derived from two Greek words *psche* - the soul, and *soma* - the body is used to describe bodily symptoms which are of psychological, mental or emotional origin. The study and treatment of disease, disorders, or abnormal states in which psychological processes and reactions are believed to play a prominent role.

Psychotherapy - is that form of therapy which applies to disorders of the mind. It aims at enabling the patient to understand and face the problems which are causing him anxiety. Suggestion, re-education and rehabilitation are amongst the measures employed.

Radiology - The science concerned with the use of ionizing radiation's.

Rheumatoid Arthritis - R.A. is an inflammatory condition principally affecting the peripheral joints accompanied by systematic disturbance and characterized by swelling of the affected joints; bony changes and wasting of muscles above and below the joints occur.

Shamam - Is a person of either sex who has mastered spirits and can at will introduce them into his own body.

Senility - implies failure of body and mind in old age. However, many persons retain bodily and mental vigour, but illness, financial worry, anxiety and frustration may precipitate the onset of senile symptoms.

Smallpox or **variola major** is a highly communicable disease, due to a virus, characterized by a rash which may be discrete when the pocks are distinct and separate; confluent when they run together; or semi-confluent and haemorrhagic or toxic, which is a severe, often fatal, variety where haemorrhages occur into the skin.

Space Medicine - A special branch of aviation medicine which deals with the stress imposed on man by projection through and beyond the earth's atmosphere, flight in interplanetary space, and return to earth. Such stresses include the agravic state, exposure to radiation, and isolation. Also known as **aerospace medicine**.

Stress Disorders - Often accompany changes in environment and only become obtrusive when adaptation either is not made or is not maintained. There is a present tendency to associate a number of physical conditions demonstrated by some alteration of the function of an organ, and some instances of injury, overwork, exhaustion and infection, with so called stress. Considerable mental stress is associated with living in modern society, particularly amongst those inclined to emotional conflict; but most often there seems to be a combination of physical and mental stress.

Stroke / Hemiplegia - Paralysis of the face, arm and leg on one side of the body, is due to an upper motor neuron lesions of the opposite side of the cerebrum.

Suicide - or self-destruction, has many predisposing causes - mental depression, isolation, loneliness may all contribute and in an accumulation of small miseries, one small incident can trigger off the act. Not all attempts at suicide are meant to end fatally. In many cases it is a '*cri de coeur*', a call for help and sympathy.

Tuberculosis - is a communicable disease caused by the mycobacterium tuberculosis, the tubercle bacillus, which is acid-fast and extremely resistant to the actions of chemicals and heat. It can persist for months and sometimes years in the dusk of dark and ill-ventilated rooms.

Vaccination - which began with the work of Edward Jenner on smallpox, q.v., over 170 years ago, has been further developed by the discovery and preparation of substance which, when injected into the tissues of the body, stimulate them to produce protective antibodies.

Yellow fever - is a tropical disease due to a virus conveyed to man by the aedes mosquito. It is characterized by jaundice, from which the name of the fever is derived. Usually yellow fever is a mild disease but acute attacks do occur, which can be fatal.

GLOSSARY OF ARABIC WORDS

Abjad - Also called *jafr*, the science of numerical value configurations of the Arabic alphabet.

Adab al-tabib - Professional ethics for doctors.

Akhlat (sing. *khilt*) - Humors, essences, temperaments.

Al-Basir - The Perceiver (to have knowledge of something through one of the senses, especially sight or through the mind)

Al-Hawi fi'l-tibb - The comprehensive book on medicine.

Al-Jahiliyyah - From "jahil" meaning "ignorant," "un-taught." The "time of ignorance" or period of Arab paganism preceding the revelation of Islam.

Al-Qanun fi'l-tibb - The Canon of Medicine.

Allah - The Arabic proper noun for the One True God (al-ilah: the Divinity).

Al-Tibb al-Nabawi - Prophetic Medicine.

An-nafs al-ammarah - "The soul which incites to evil", 12:53.

Aql - Creative reasoning. Faculty of reason. The rational reasoning power of the mind, which neither plants, nor animals nor water has.

Arsh - The Throne of Allah, the Ninth Heaven.

Bait al-Hikma - House of Wisdom.

Battle of Badr - The first major encounter between the Muslims and the Meccan caravan led by Abu Sufyan (19th Ramadan 2/Friday 17th March 623)

Battle of Uhad - During this battle, Quraysh defeated the Muslims in the third year of the Hijrah (625).

Bedouin - Desert dweller.

Bisht - Cloak.

Bismi Llah ir-Rahman ir-Rahim - "In the Name of God, Most Gracious, Most Merciful," the opening words of the Qur'an, frequently used as an invocation at the commencement of any word or action.

Dar al-hadith - House of tradition.

Dar al-Ilm - House of Science

Dar al-qira'a - House of Qur'anic teaching.

Dar al-tibb - House of medicine.

Darasa - To study.

Darrasa - To teach.

Dhikr - (Also spelled *zikh*, which signifies the Turkish and Persian pronunciation) - "Remembrance," the Sufi ceremonies of liturgical recitations of sacred formulas and divine names.

Dishdasha - Gown.

Fikr - The world of thought, deep meditation, remembrance of God by mental means.

Ghayb - The Unseen as described in the Qur'an; includes the worlds of jinns, angels, disembodied souls, and other planes of existence.

Hadith - A report embodying a sunnah of the Prophet (s.a.w.s.)

Hakim - "Wise," a physician who treats physical, mental, and spiritual illnesses.

Halal - (lit. "allowed" [from prohibition]). That which is lawful, particularly food, and meat from animals that have been ritually slaughtered.

Haram - (lit. "restricted," "forbidden"), the opposite of Halal.

Idhn - The Permission of God.

Ihsan - "Blessing," the interior or internal conditions that result from performance of Islamic behaviors.

Ijmaa - agreement of all the 'ulamas.'

Ilm - Knowledge.

Ilm al-Huruf - Science of Arabic letters.

Iman - Faith in God.

Insan - The created world, life, specifically human beings.

Islam - "Submission," "peace," the way of life contained in the doctrines of the Qur'an and suggested in the statements and actions of the Prophet Muhammad (s.a.w.s.).

Israfil - Angel of Resurrection.

Jinns - A creation of Allah, made of smokeless fire. Unseen.

Khalifa - Also written as Khaleefa. God's representative on earth.

Khayal - Imagination.

Kitab al-Nabat - The Book of Plants.

Kyas - The making of religious law on the basis of other law, for example, comparing a situation with another which has similar connotation.

Madrasa - Place where teaching takes place.

Madrasa al-tibb - Place where medical knowledge is taught.

Majlis - Assembly.

Mala'ikah (sing. *malak*) - Angels.

Maqam an-nafs - When one occupies the station of egotism.

Mu'jizah - A divine miracle, which admits of no human activity or agency, an act beyond natural laws and reasoning power.

Muslim - One who adopts and follows the way of life of Islam, a believer in Allah.

Mutabbib - Medical practitioner.

Nafas - That life activating force which enters with each breathe, the breathe that activates all physiological functions.

Nafs - A word for the body and its appetites, such as hunger, desire for wealth and fame, sexual urgings, the spirit activator.

Nafsi am-mara - Commanding spirit, which creates inordinate appetites.

Niyah (or *niyyat*) - Intention, formal declaration to do something.

Nur - Light.

Qalb - Heart. The heart according to Islam is not just a physiological pump for the circulation of blood throughout the body. It serves two more vital, interrelated functions. One, the heart is the storehouse of divine attributes, and two, it is the seat of manufacture of the nafas - that life activating force which enters with each breath, the breath that activates all physiological functions.

Qur'an - "Recitation," the revealed scripture of the Islamic faith, conveyed by the Angel Gabriel (a.s.) to the Prophet Muhammad (s.a.w.s.) over a period of twenty-three years.

Ruh - Soul, that which exists after death, which marks the end of both physical and mental life.

Salat - The five-times-per-day obligatory Islamic prayer.

Sama - Sky.

Shari'at (or shari'ah) - The divine laws and codes for human life, conveyed by all prophets, but corrected and completed and sealed in the first of the Last Message, the Holy Qur'an.

Shaykh - Sufi master, guide, teacher.

Shi'ism - A branch of Islam with doctrines significantly different from those of the Sunni majority (Glasse, 1989:364-365). Shi'ites themselves are divided into three principal groups. The largest division by far, Twelve Imam Shi'ism, also called "Twelvers" (ithna 'ashariyyah), has been the official religion of Persia since the Safavid dynasty came to power in 907/1501. Twelve - Imam Shi'ites make up 60% of the population in Iraq, and Twelve - Imam Shi'ite minorities are also present in Afghanistan, Lebanon, Pakistan and Syria, as well as in Eastern Province of Saudi Arabia and some Gulf States including Kuwait. The Zaydis, also called "Five - Imam Shi'ites" or "Fivers," are found in Yemen, where they make up about 40% of the population. The third largest group, altogether two million or more, the Ismailis, who are "Seven - Imam Shi'ites," are concentrated in India, and scattered across Central Asia, Iran, Syria, and East Africa.

Silsilah - "Chain" - Line of transmission from master to master of the spiritual power and teaching of a *tariqat*.

Sirr - Divine secrets, the gratest mystery, root, origin.

Siyam - A fast, particularly the Islamic fast conducted during the month of Ramadan.

Sufism - The mysticism or esoterism of Islam. The word is commonly thought to come from the Arabic word *suf* ("wool"): rough woolen clothing characterized the early ascetics, who preferred its symbolic simplicity to richer and more sophisticated materials. Sufism is the science of the direct knowledge of God, its doctrines and methods are derived from the Qur'an - Islamic revelation.

Sunnah - The actions and words of the Prophet Muhammad.

Sunni - The largest group of Muslims are the Sunnis, who recognize the first four Caliphs, and adhere to one of the four Sunni schools of law.

Surat (or *surah*) - A chapter of the Qur'an. The Holy Qur'an is composed of 114 surahs of varying lengths.

Tabib - One who has both a medical and philosophical education.

Tariqat (from *tariq*, "path") - The Sufi path, a stage of development in Sufism.

Ta'widh - A written or spoken religious amulet containing verses (and sometimes numbers) from the Holy Qur'an, frequently constructed by shakhs for healing purposes.

Tib al-A'imma - Medicine of the Imams.

Wahm - Divine Decision. Imagination, the power of conceiving what is not present, the decision of Allah.

Waqf - An act of giving something for public use. Endowment or provision.

Wasta - Influence.

Yawm al-Qiyamah - The Day of Judgement.

Appendix I

INTERVIEW

Name: _____

Occupation: _____

Age: _____ Sex: _____

Work Experience: _____

Questions:-

1. What is your opinion regarding Arabisation of Medical education?

2. Would you consider this as a step forward or a step backward for Kuwait in terms of the many challenges facing health care professionals?

3. What is your opinion regarding segregation of sexes at Kuwait University?

4. Are you satisfied with the standard of modern medicine in Kuwait?

5. What would you like to see improved in the hospitals in Kuwait, from the point of view of Allied Health?

6. How do you perceive the concept of medical insurance in Kuwait?

7. What are important steps or research will need to be carried out to operationalise this concept?

8. What would you consider the standard of medical care in Kuwait?

Excellent ____ Good _____ Average ____ Poor ____

9. If you consider it average or poor, how do you think it can be improved?

10. Do you think that modern medicine has the ability to influence the culture and value system in Kuwait? _____

11. Do you think that Kuwaiti patients are suffering from psychosomatic problems much more today compared to previous times?

12. If Yes, Why do you think this is so?

13. What do you see as the foreseeable future of health care in Kuwait?

14. Do you think Islamic medicine could be incorporated into Modern medicine?

15. Do you think Kuwait has something to offer to the West like spiritual dimension in health care?

16. What is opinion regarding Islamic medicine in Kuwait?

17. If you had to define Islamic medicine, how would you define it?

18. What type of Islamic medicine is available to patients?

19. What kind of patients seek Islamic Medicine in Kuwait?

20. What is the population of patients who seek Islamic Medicine?
