

Towards an Islamic Medical Anthropology

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Abstract

Medical anthropology is an emerging interdisciplinary field of study, which holds that health and sickness are related not only to biological and physiological processes, but to social, cultural, and psychological factors. It has a holistic perspective on health and sickness.

Four distinct dimensions of Islamic medicine form the perspective of medical anthropology. First, health and sickness are to be seen in their totality and in relation to not only biochemical and physiological processes but environmental, sociocultural, moral, and personal factors. Second, the Islamic perspective on health and sickness is embedded in the Islamic ethos that avoids the extremes of excessive self-gratification, abnegation, and renunciation. Third, Islam underscores the positive as well as negative consequences of behavioral, affective and attitudinal factors for one's health. Finally, rather than viewing sickness and disease in altogether negative terms, the Islamic medical system takes cognizance of its positive dimensions as well.

Key words: medical anthropology, holistic medicine, Islamic medicine

All therapeutic systems entail an implicit or explicit view of human nature, a vision of health and well-being, and a theory of disease etiology. The traditional systems of medicine postulated a unitary view of health and medicine, which was premised on an interactionist conception of the human mind and body. The earliest expres-

sion of this unitary vision is to be found in the Chinese system of medicine. The principle of Ch'i Kung in Chinese medicine emphasizes mind-body discipline as a major means of enhancing and restoring health. The Greek sage Hippocrates (460-377 BC), who is regarded as the father of modern medicine, believed that the mind and body, psyche, and soma are inextricably related. He considered health as emanating from living in harmony with nature and oneself.

This holistic vision of health and medicine suffered a setback with the emergence of the Cartesian-Newtonian world view during the 17th century. This world view held matter to be the basis of all existence. The universe was conceived as a huge machine, devoid of any intrinsic meaning or purpose. The mechanistic principle, which lay at the heart of the Cartesian-Newtonian world view, held that all natural phenomena could be reduced to the behavior of minute particles of matter.

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Rene Descartes (1596-1650), who was one of the main architects of the scientific world view, made a distinction between "res extensa" (material substance) and "res cogitans" (mind) and regarded them as independent entities. He considered the body as a machine reducible to basic mechanical operations. Cartesian dualism and the reductionistic view of the body exerted a profound and far-reaching influence on medical science. Developments in microbiology, biochemistry, and other related sciences reinforced the mind-body dichotomy. The biomedical model, which has been the paradigm in medical research and practice during the last 300 years, sought to reduce disease to the lowest common denominator. It viewed disease exclusively in terms of biochemical imbalances or neurophysiological abnormalities. It assumed that sociocultural, psychological, and behavioral factors and processes play no significant role in disease etiology.

The biomedical model has been remarkably influential and successful in eradicating a variety of diseases and thereby in mitigating the scale of human suffering. However, during the past two decades, there has come about a growing realization of the scientific and clinical inadequacy of the biomedical model in the explanation of the disease process. For one thing, the Cartesian paradigm, which posits the duality of mind and body and which seeks to reduce the study of whole organisms and organized complexities to fragments and part-processes, has come under trenchant criticism.^{1,2} Second, the physical and exclusive view of disease etiology, which is inherent in the biomedical model, has been found to have severe limitations in respect to behavioral and psychosomatic illnesses. The growing incidence of cardiovascular disease, diabetes, AIDS, and certain types of cancer in the developed countries has focused attention on the fact that the etiology of disease is multifactorial, and cultural, psychological and behavioral factors, in addition to biochemical and neurophysiological processes, have a significant bearing on vulnerability to disease. Third, the preoccupation in the biomedical model with illness, rather than health, and thereby with treatment, rather than prevention, has engendered dissatisfaction among health specialists and practitioners. Fourth, the growing public awareness about the noxious side effects of modern medicine and its dubious role in the treatment of chronic diseases have adversely affected the credibility of the biomedical model. Coupled with this is the growing popularity of alternative systems of medicine such as homeopathy, naturopathy, acupuncture, Ayurveda, Unani, and Islamic medicine. Finally, the enormous costs of health care and extensive medical regimens in the developed countries have led to a rethinking of the goals and priorities of the health care system.

All these developments paved the way for a serious re-examination of the aims and claims of the biomedical model. George Engel critically reviewed the limitations of the biomedical model and proposed an alternative in the form of a bio-psycho-social model of medicine. The bio-psycho-so-

cial model maintains that health and illness are caused by multiple factors, including genetic and biochemical, environmental, cultural, psychological and behavioral factors, and produces multiple effects. It holds that mind and body should be viewed in an interactive framework and that both influence matters of health and illness. The bio-psycho-social model emphasizes both health and illness and emphasizes the importance of preventive medicine.^{3,4}

The Emerging Holistic Paradigm of Health and Medicine

During the past two decades, developments in the medical and behavioral sciences have paved the way for the eventual replacement of the biomedical model with the postmodern, holistic model of health and medicine. This emerging model espouses the adoption of a multifactorial, in place of a unicausal and reductionistic, approach to health and sickness. This necessitates the integration of several health-related disciplines, including neurophysiology, biochemistry, psychoneuroimmunology, behavioral medicine, cognitive therapy, and medical anthropology. The emerging holistic paradigm focuses positively on health and not on disease per se. This entails a shift of emphasis from health-impairing behavior to health-promoting behavior and from the treatment of disease to prevention. Furthermore, the emerging model takes due cognizance of the role of the individual in promoting or impairing his own health. In other words, it provides sufficient scope for cognitive-behavioral interventions in the enhancement of health and the treatment of illness.

The following examines two interrelated dimensions of the emerging holistic paradigm of health and medicine: psychoneuroimmunology and disease etiology and cognitive-behavioral interventions on health and disease.

Psychoneuroimmunology and Disease Etiology

Recent advances in neurochemistry, neuroendocrinology, and psychoneuroimmunology have established that the human brain can modulate the functioning of the immune system. Physiological responses, including neural and hormonal changes, may be elicited by psychological processes and stimuli.

Some of the most promising research in this connection, which bring into focus the complex nature of mind-body interaction, deal with stress-related illnesses. The research of Hans Selye and Richard Lazarus greatly expanded our understanding of the neuroendocrine correlates of stress. Stressors or stressful situations and stimuli accelerate the secretion of the adrenocortical hormone cortisol. There is growing evidence to the effect that stress influences vulnerability to immunologically related illnesses.^{5,6} Stress has a critical bearing on the onset and course of a variety of illnesses, including coronary heart disease, diabetes, and a decrease in digestive and eliminative processes.

Stress is essentially a cognitive-behavioral phenomenon. Hence, a person's cognitive and behavioral response to stress has a crucial bearing on its intensity and the prospects of

coping with it. Since stress modulates immune functioning and resistance to disease, a reduced state of stress has a positive bearing on health and well being.⁷⁻⁸

Cultural and Behavioral Correlates of Disease

The fact that health and sickness are related not only to biological and physiological processes but also to environmental, cultural, and behavioral factors is not a modern discovery. All traditional systems of medicine recognize the role of cultural and behavioral variables in the etiology, prevention, and treatment of disease. Ibn Khaldūn (1332-1406) made very perceptive observations on the bearing of the process of urbanization on disease etiology. He observed that overpopulation and atmospheric pollution in large cities give rise to a variety of illnesses. The culture of the city, which is characterized by a luxurious lifestyle, a penchant for rich food, and lack of physical exercise, is a breeding ground for several kinds of ailments.⁹

In recent years, extensive research into the cultural and behavioral correlates of disease have confirmed the observation of earlier writers and medical specialists.¹⁰⁻¹² Thus, illnesses such as coronary heart disease, diabetes, and certain types of cancer have been found to be positively correlated with behavioral and lifestyle factors. Coronary heart disease, which is the leading cause of death in the United States and several European countries, is linked to such socio-cultural variables as diet, lack of exercise, smoking, and stress. Medical and health specialists are of the view that growing health problems in the developed countries can be traced to "behavioral pathogens" or lifestyle factors.⁷ In the U.S., for example, more than 50% of deaths from the 10 leading causes are due to the modifiable lifestyle factors.

Undoubtedly, the role of genetic and biophysiological abnormalities in the etiology of disease cannot be denied. The point, however, is that the disease process is to be understood in terms of a complex interplay among multiple factors, including genetic and biochemical aberrations, environmental and cultural processes, and behavioral variables.

Cognitive-Behavioral Interventions and Treatment

The implicit concept of man in the biomedical model is that of a biological organism that is a passive recipient of external stimuli. Consequently, the biomedical model provides little or no scope for cognitive-behavioral interventions in the prevention and treatment of disease.

On the other hand, the concept of man in the postmodern, holistic model of health and medicine is that of an active and self-conscious agent who processes and interprets stimuli in the light of his beliefs, values, and commitments. Human behavior is seen as being conditioned by cognitive processes. Therefore, one's perception and appraisal of a situation, which is influenced by one's beliefs, values, images, and meanings, has a critical bearing on the processes of health and illness. Research on cognitive behavior therapy has

brought out the role of coping in mitigating the intensity of illness and in facilitating recovery. Coping represents positive, self-conscious, and purposeful behavior as opposed to defensive or passive behavior. Coping resources comprise the repertoire of human potentialities, including beliefs, commitments, morals, and skills as well as social support and cultural ethos. Positive emotions and attitudes influence the effects of the neuroendocrine system on immune functioning, which enhances the prospects of health.⁸ On the other hand, negative images, emotions, and thought processes produce depression, cynicism, and anxiety, which are conducive to physiological and psychosomatic ailments. Cognitive appraisal and coping have a critical bearing on stress-related illnesses. Behavioral interventions based on positive cognitive appraisal and coping strategy have been found to be effective in the amelioration of psychosomatic illnesses as well as in encouraging health-promoting behavior. This is reinforced by research in biofeedback, which indicates that people consciously exert control over physiological processes such as blood pressure, heart rate, and brain activity.

The Islamic Medical Paradigm

As we have pointed out at the outset, all medical traditions entail a certain concept of human nature, a vision of health and well-being, and a theory of disease etiology. Therefore, a given medical tradition or paradigm should be examined in the context of the larger system or world view in which it is embedded. Since the Islamic medical paradigm is informed and inspired by the Islamic ethos, it is worthwhile to bring out its bearing on the processes of disease and health. Four distinct, albeit interrelated, features of the Islamic world view may be delineated:

- (a) the centrality and omnipotence of God,
- (b) the comprehensive character of the Islamic moral and behavioral code,
- (c) the moral accountability of man, and
- (d) the stress on balance and moderation.

The Islamic faith considers man as the vicegerent of God on earth and emphasizes his rational and creative faculties. The Islamic view steers clear of the extremes of romantic idealism and cynicism in that it takes cognizance of the benignity as well as frailties of human nature. The Islamic world view rejects Cartesian dualism and views the human mind and body in a unitary and interactive framework. The Islamic medical paradigm has a characteristically holistic and integral perspective on health, illness, and medicine. It takes into account the interplay of a multiplicity of factors, including biochemical, cultural, behavioral and psychological, in disease etiology. Three distinct dimensions of Islamic medical anthropology may be identified: (a) the cognitive-behavioral framework of the Islamic medical paradigm, (b) Islamic pharmacology, and (c) Islamic medical paradigm and recent research.

The Cognitive-Behavioral Framework

Traditional health practitioners in the Islamic world be-

gin their prescription with the invocation: God is the Healer. This is symptomatic of the deeply held Islamic belief that in the ultimate analysis deliverance from disease rests with God.

Allāh says: "And when I am ill, it is He who cures me."¹³

This belief is supplemented by the exhortation that one should bear physical suffering and distress with fortitude and forbearance, for he is constantly under the benign gaze of God.¹⁴ Furthermore, the belief that even in moments of acute distress, God is beside one and that He would take care of him, serves as an effective buffer against depression and anxiety attendant upon illness. The moral-ontological framework of the Islamic medical paradigm looks at disease as resulting, not only from genetic and biochemical malfunctioning, but also from moral lapses and sins of omission and commission. Thus, Muḥammad [PBUH] is reported to have said that the wide prevalence of sexual promiscuity in a community invites the epidemic of plague. Homosexuality, which is one of the major contributory factors leading to the spread of AIDS, is explicitly condemned in the Qur'ān, and it is pointed out that the people to whom the prophet Lūt was sent were wiped out from the face of the earth on account of their indulgence in this unnatural practice.

An important aspect of the Islamic medical paradigm is that, rather than viewing illness and disease in altogether negative terms, it also takes into consideration its positive dimensions. Thus, illness, especially when it is borne with patience and fortitude, is seen as a compensatory mechanism for moral lapses and sins. Muḥammad [PBUH] is reported to have said:

"God makes a person, to whom He wishes to do good, go through distress and hardship."

The Islamic ethos fosters a personality structure and behavioral style that is positively correlated with physical and psychological health. The believers are exhorted to eschew negative emotions such as anger, hatred, jealousy, malice, greed, and conceit. They are encouraged to develop positive emotions and attitudes such as patience, humility, forbearance, kindness, and brotherliness. As we shall show a little later, positive emotions and attitudes have a critical bearing on the enhancement of physical and psychological health.

The Islamic faith offers a comprehensive moral and behavioral code. Four aspects of the Islamic code, which have a significant bearing on matters of health and illness, deserve to be highlighted. One of them is the great emphasis on hygiene and cleanliness in all spheres of life. The second comprises the dietary laws of Islam, which forbid the consumption of alcoholic drinks and certain types of meat, such as the flesh of dead animals, reptiles, insects, and swine. The third aspect of the Islamic code relates to sexual gratification. The Islamic code stipulates the regulation of the sexual drive through the institution of marriage and suggests moderation in its gratification. It condemns sexual promiscuity as well as sexual aberrations such as homosexuality and lesbianism and considers them as harbingers of disease. The

custom of male circumcision in the Islamic code serves as an effective safeguard against diseases related to the genital organs. The fourth aspect of the Islamic code relates to the emphasis on balance, moderation, and a simple way of life, which is in harmony with nature. The Islamic code avoids the extremes of excessive self-gratification, on the one hand, and renunciation and abnegation, on the other. The Prophet warned against the adverse consequences of overeating and a luxurious lifestyle and set a personal example of simplicity and frugality. The institution of fasting in Islam plays an effective role in offsetting the noxious effects of dietary imbalances and in restoring health and vitality.

The Islamic medical paradigm takes cognizance of the multifactorial character of disease etiology and accordingly suggests a multipronged strategy to combat illness. Moḥammad [PBUH] held that there is a cure for every disease and suggested medication for the purpose. In addition, he also suggested recourse to prayer as well as repetitive invocation of Divine names to supplement the process of healing and recovery. The Prophet was well aware of and recommended the positive role of social support and visitation to the sick in the process of recovery and rehabilitation.

Islamic Pharmacology

There are scores of natural, herbal, and medicinal substances that are mentioned in the Qur'ān and particularly in the "Sunnah" (traditions) of Prophet Moḥammad [PBUH]. The efficacy of these substances has been pinpointed by the Prophet and confirmed in Islamic medical research and practice during the past 14 centuries of the Islamic Era. These substances include honey, fig, olive oil, dates, quince, barley, henna, vinegar, senna, mushroom, and kust, among several others.¹⁵ Muslim scientists and physicians have made a valuable contribution in expanding and enriching the corpus of Islamic pharmacology. The wide-ranging contributions of ibn Sīnā, ibn al-Nafīs, al-Zahrāwī, al-Rāzī, and ibn Wāfid, among others, in the effective utilization and dissemination of the Islamic medical heritage, have been widely recognized and appreciated.¹⁶⁻¹⁸ However, much still remains to be done. It is estimated that more than three million medical manuscripts left by the scientists of the Islamic Era are still lying scattered in various libraries and museums across the world.

Islamic Medical Paradigm and Recent Research

There are recent advances in neurophysiology, psychoneuroimmunology, behavioral medicine, cognitive therapy, medical anthropology, and dimensions of the Islamic medical tradition. First, research in pharmacology and biochemistry has confirmed the efficacy of the natural, herbal, and medicinal substances that are mentioned in the traditions of the Prophet. Research on the water of "Zamzam" (a well in the Grand Mosque in Makha, Saudi Arabia, honey, and olive oil are particularly noteworthy in this connection. Second, research on AIDS and certain types of cancer have

vindicated the validity of the Islamic sexual code. While homosexuality is now universally recognized as one of the contributory factors in the transmission of the AIDS virus, cervical cancer has been found to have a close correlation with sexual promiscuity. Similarly, it has been found that certain types of cancer are not found among Muslims due to the practice of male circumcision.¹⁰ Third, the health-promoting nature of the Islamic dietary laws in general and that of moderation and balance in food intake in particular has been substantiated by modern research. Of particular importance in this connection is the growing world wide recognition of alcohol as a major obstacle to the development of the human capital. Alcohol consumption has a positive correlation with cirrhosis of the liver, which is one of the five leading causes of death worldwide. Alcohol-related problems accounted for 2 million deaths in 1989. An increase in alcohol consumption is correlated with increasing levels of premature mortality and morbidity and enormous health and economic costs.¹⁹ Similarly, the consumption of pork, which is forbidden in Islam and Judaism, has been found to be associated with several gastrointestinal and cardiovascular diseases.

Extensive research in diet-related diseases has shown the value accorded to a simple and moderate diet in the Islamic tradition. Several illnesses, including hypertension, coronary heart disease, diabetes, kidney problems, and pulmonary problems, have been found to be positively related to excessive eating and cholesterol-rich food.¹⁰ Experiments at the University of Texas have shown a positive correlation between frugal diet and longevity. Certain studies have indicated that in regions where famine is abundant and meat is scarce, cardiovascular disease is virtually unknown.

Fourth, studies in cognitive-behavioral interventions have brought out the role of cognitive processes, including beliefs, images, and commitments, in preventing the onset of disease, in the treatment of chronic ailments, and in the process of recovery.⁸ A hopeless attitude towards illness has been reported to increase susceptibility to infectious diseases. Depression and chronic negative emotions such as helplessness, hostility, and mistrust, play a crucial role in cardiovascular disease. Anger and hostility are correlated with atherosclerosis and greater neuroendocrine reactivity to stressors.²⁰ The Islamic medical paradigm inculcates a positive and healthful attitude towards illness, which is premised on the conviction that God will ultimately deliver us from illness. It also encourages the patient to take recourse to medication as well as prayer and meditation. This strategy has multiple cognitive and existential functions, including a substantial reduction in the physical and psychological severity of pain and distress.²¹ This approach is reinforced by a perspective in existential psychiatry and phenomenology, which hold that treatment can be most effective in the context of the person's world and cultural ethos.

Studies in stress-related illnesses indicate that various forms of relaxation have a positive effect on health and re-

covery. Techniques of relaxation induce muscle relaxation to mitigate tension.²² These findings confirm the value of prayer, meditation, recitation of the Qur'an, and repetitive invocation of Divine names in the Islamic tradition.

Allāh says: "Verily, the remembrance of God has a soothing effect on (human) hearts."²³

The Islamic medical paradigm recognizes that cognitive-behavioral interventions in facilitating the process of healing, and recovery can be reinforced by a positive and favorable social environment. Sincere and tangible support from friends, family members, and neighbors mitigates the effects of depression and stress. It expands the patient's coping ability and enhances the prospects of recovery. A supportive social network is associated with lower morbidity and mortality rates.¹²

Finally, the outline of Islamic medical anthropology, which we have sketched in the foregoing, suggests that the Islamic medical paradigm is health-oriented, rather than disease-oriented. Consequently, prevention has primacy over treatment in the Islamic medical system. The preventive regimen in the Islamic medical system weighs heavily in favor of cognitive-behavioral and moral parameters. It is significant that preventive medicine occupies a key priority in modern medical discourse.²⁴ Norman Cousins in his book *The Anatomy of an Illness* (1981) raises an important question: Can we get better by experiencing positive emotions since negative emotions tend to make us ill? The growing literature in biofeedback, behavioral medicine, psychoneuroimmunology and cognitive therapy, as well as in alternative and indigenous medical traditions tends to answer this question in the affirmative. There is little doubt that in the years to come the biomedical model will be eventually replaced by a holistic model of health and medicine. The Islamic medical paradigm is poised to make a seminal and far-reaching contribution to this emerging holistic model. The most promising and enduring contribution of the Islamic medical tradition lies in its demonstration of the extent to which biochemical and neurophysiological processes can be modulated and determined by factors that are embedded in the God-given potentialities of the human psyche, and which include faith, belief, commitment, and will power.

Allāh says: "Soon will We show them Our signs in the (furthest) regions (of the earth) and in their own souls, until it becomes manifest to them that this is the Truth."²⁵

Notes

1. Richard Lazarus, a pioneering figure in psychoneuroimmunology, pointed out that stress is not a property of stimuli or events, but it exists in the mind of the perceiver. Consequently, stress can be produced even in the absence of physical stressors. Real or perceived loneliness and a sense of meaninglessness of life may produce stressful effects. The Islamic belief in the benign and protective presence of God serves as an effective buffer against loneliness and depression.

2. Prophet Muḥammad [PBUH] is reported to have said:
"Disease compensates for certain kinds of sin" (Bukhārī, Muslim, Tirmidhī, 'Abu Dāwūd). He is also reported to have said:

"Do not consider fever as evil, for it wipes out sins the way fire takes away dirt from iron."

It is interesting that at the biophysiological level, certain types of fever may be good for health. When the body faces an attack from pathogens, the white blood cells release "chemicals" that suppresses the growth of bacteria and other infectious agents. This immune response in the body induces fever.

3. Prophet Muḥammad [PBUH] is reported to have said:

"The believer eats in one intestine and the nonbeliever eats in seven intestines" (Bukhārī, Muslim, Tirmidhī, ibn Mājah). He also said:

"A man's food suffices for two." Also:

"Those who eat to their hearts' content will be the most hungry on the Day of Judgment." (ibn Mājah).

4. Prophet Muḥammad [PBUH] made a perceptive observation about fasting:

"Fasting is the Zakah (tax) of the human body." (ibn Mājah).

5. Prophet Muḥammad exhorted people to visit the sick. He said:

"When you visit a sick person, engage him in pleasant conversation. This boosts his morale and cheers him up." (ibn Mājah).

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