

AN INTRODUCTORY ON MEDICAL ETHICS HISTORY IN DIFFERENT ERA IN IRAN

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ABSTRACT

Medical ethics has a long history worldwide, and the move towards a transcultural ethics must be based on an appreciation of the history that has produced the present relationships. It is often thought that medical ethics history has begun at the time of Hippocrates, however it is much older. It is clear that various cultures such as Babylonia, ancient Egypt, Greece, and the Persians have attempted to regulate medicine and to protect patients' rights in the known ancient world. One of the earliest written provisions in this field that comes back to about 1750 BC is the code of Hammurabi. In medieval, great Iranian physicians had paid special attention to ethics in their practices, teachings and manuscripts.

In this paper we aimed to explore the roots of medical ethics in Persian history, particularly after adherence of Iranians to Islam. History of medicine in Iran has begun at about fourth century BC. There was a gap between the ancient civilizations and the Renaissance era in Europe, commonly called the dark ages. The immense strides have been made by the Persians in that long interval which is briefly reviewed.

Keywords: Medical ethics, Persian history, Medical history, Ancient civilization, Islam, Iran

INTRODUCTION

We live in a pluralist world with different forms of beliefs. The move towards a transcultural ethics must be based on an appreciation of the history that has produced the present relationships. This can be understood through sharing experiences, openness to the narratives of others, willingness to others, and an attitude that pays attention to our common experiences of humanness (1). Any way, respect to history of the cultures is a moral responsibility. It is now firmly established that there was widespread communication between the various cultures flourishing in the known ancient world (2). In this paper we aimed to explore the roots of medical ethics in Persian history, particularly after adherence of Iranians to Islam. There was a gap between the ancient civilizations and the Renaissance era in Europe, commonly called the dark ages (3). The immense strides which have been made by the Persians in that long interval is briefly reviewed.

For compilation of the article, the related articles have been searched in PubMed, IranMedex, and Ovid databases using keywords such as medical ethics, Persian history, medical history, Islam and Iran. We also referred to opulent valid English and Farsi books in the Medical Ethics Research Center and Medical History Museum

of Tehran University of Medical Sciences.

Brief History of Medicine in Iran

History of medicine in Iran has begun at about fourth century BC (4), but the golden age of Persian medicine was at the time when the famed school of Jundishapur invited the scientists and physicians of all origins and welcomed the cultural traditions of India, Egypt, the Middle East and Greece (5). The Persian city of Jundishapur, conquered by the Arab Muslims in 638 AD, became a major centre for the dissemination of ancient manuscripts (6). The Jundishapur school played a decisive role in the birth of Islamic Medicine (5,7).

Islam stressed the importance and respect to learning, encouraged cleanliness and personal hygiene, developed the respect of authority and discipline, forbade destruction, and tolerated other religions (3). Other than some verses in holy Quran, there are many narrations of the Prophet Mohammad (Peace be Upon Him: PUH) (570-632 AD) which express the emphasis that Islam laid on sciences. Among them are two famous phrases: "Seek learning even if it be in China" and "The ink of scholars is worth more than the blood of martyrs". Likewise, "He who leaves his home in search of knowledge," said

Muhammad (PUH), "walks in the path of God". Based on these deep attentions, the followers of the Muhammad (PUH) established elementary schools, usually in the mosques (6).

A century after the death of the prophet Muhammad (PUH), his followers had conquered half of Byzantine Asia, all of Persia, Egypt, North Africa, and Spain (6). It was during the Islamic empire era that the first great scientific advances in medicine were made (8). Medicine in Islam passed through three stages (3): First, the stage of translation of foreign scientific sources into Arabic (7th–9th centuries); Second, the stage of excellence and genuine contribution in which the Islamic physicians were the leaders and the source of new chapters to medicine (9th–13th centuries); and third, the stage of decline (after 13th century) (3).

The first phase of the Arab-Islamic tradition of formal medicine was thus a major translation movement (7). The Islamic physicians began by collecting all the medical observation and logic of Hippocrates and his followers, but they went on to much more practical observations and really managed to find some useful cures for some diseases (8). A body of knowledge of medicine was inherited by the Muslims in the early phase of Islamic history [661–861 AD/40–247 AH: After Hejira (the time of the migration of the prophet Mohammad from Mecca to Medina in 622 AD)] from mostly Greek sources and so from Persia, Syria, India and Byzantine (9). Many of medical and philosophical works were translated into Arabic versions (6). By the tenth century AD all essential Greek medical writings being translated into Arabic, and Arabic became the international language of learning and diplomacy (10). This knowledge not only was translated into Arabic, the literacy and scientific language of the time, but also was expounded, assimilated, exhaustively added to and subsequently codified, and 'Islamicized' (9). Medical education was empowered in Islamic civilization era. Training of physicians in basic sciences, clinical training curriculum in internal medicine and surgery, licensing of physicians, and emphasis on the Hippocratic Oath were established in this era (10). Also, employing inspectors to check drugs and maintain quality control of drugs was carried out in that period (10).

The development of efficient hospitals was an outstanding contribution of Islamic medicine (10,11). The hospitals were run by government and the directors of hospitals were physicians (10). Hospitals had separate wards for male/female patients and for different diseases (3,7,10,12). Only qualified and licensed

physicians were allowed by law to practice medicine (10). In the hospital, medical students were taught, nursing services were provided for patients, and drugs were prescribed free for all. For the first time, these hospitals kept records of patients, gave patients special apparel and stored their clothes and valuables until the discharge (10). All services were free and on discharge, each patient received five gold pieces to support himself until he could return to work (10).

A large number of hospitals were developed and funded as acts of personal charity and as a religious trust (*Waqf*) during the Islamic time (7,13,14). The main hospitals were models for medieval hospitals built later in Europe. By the end of the 13th century (AD), there were many medical centers spread through out the Islam world. Some of the important ones were placed in Damascus (was built in 706 AD), Baghdad, Jundishapur, Cairo, Tunisia, Jerusalem, Morocco and Granada (3).

The first institutions for the care of the insane were established in the ninth and tenth century AD in the Islamic cities of Baghdad, Cairo, Fez and Damascus (15). It also was to set the standards of hygiene, and preventative medicine and thus was responsible for the improvement of the general health of the masses (9). The effects of this practical sciences were expanded not only in the Islamic lands, but also in all adjoining nations including Europe, Asia, China, and the Far East. The span was measurable perhaps for an entire millennium (9).

Medical description of differences between some diseases such as smallpox and measles, and goiter and thyroid cancer, scientific definition of hay fever, identification the properties of sulphuric acid and alcohol, using silk sutures and alcohol for homeostasis, and using alcohol as an antiseptic, the use of first anesthetic drugs and a cauterizing iron in the control of bleeding, emphasis on anatomy, implantation of dental prosthesis carved from cow's bone, using cotton in surgical dressing, teaching lithotomy position, description of tracheotomy and varicose veins stripping, the first colostomy, and many other examples are some of the Muslim physicians' innovations during ninth to eleventh AD century (10,14). In the field of folk medicine, the Islamic physicians took over some of the natural cures and brought them into scientific medicine (8).

The era of Islamic Medicine introduced some very famous and notable physicians. *Ali ibn Abbas Ahwazi* (Haly Abbas), *Rhazes*, *Avicenna*, *Ibn Zuhr*, *Al Zahrawi*, and *Ibn Al Haytham* are some of most famous physicians in that era (13,16–20). Most of them were Persian. In same period, Avicenna wrote the book "*Canon*" (Al

Qanon fi al Tibb) in medicine (in 5 volumes) which was an encyclopedia containing more than one million words (21,3). It was translated to many languages and was the reference for medical schools in Europe up to the 17th century AD. This book ranked among the most famous books in the history of medicine (22). Also, the works of the Islamic surgeon of eleventh-century, *Abu al Qaim* (Albucasis), on bloodletting, cautery, operations, and instruments were translated into Latin in 1137 (15). Likewise, the Rhazes' books "*the Inclusive Work on Medicine*" (al-Hawi fi al-Tibb) and "*the Mansurian Book of Medicine*" (al-Kitab al-Mansuri fi al-Tibb) were among the important books at that time (14,7).

The middle Ages of European history roughly corresponds to the Golden Ages of Islam (6). In that period, a great civilization was established through which the torch of knowledge spread to Europe (3). Although, hospitals in the western world first began to emerge at the beginning of the fourth century, but they were not hospitals in any modern sense (2). In Europe, in the 12th century AD, it is decreed that all medical practitioners had to pass some exams before being licensed to practice (2).

The Islamic empire for more than 1000 years remained the most advanced civilization in the world. After the Renaissance in Europe (17th century AD), the writings of Islamic physicians and philosophers were eventually translated from Arabic into Latin and became a basis for development of modern medicine (9,6). Muslims have fostered the flame of civilization, and handed it over to Europe in the best possible condition. Europe, in turn, passed it to the United States of America, and the cycle continues (3).

Medical Ethics History

Scholars have devoted large efforts to look at ethics, to find out how healers and patients in different historical situations attempted to set standards for their own behaviors (23). But our knowledge of ethics in the pre-Hippocratic world is fragmentary. In medieval, Babylonia, ancient Egypt, Greece, and the Persians have attempted to regulate medicine and to protect patients' rights. Also, great Iranian physicians have paid special attention to ethics in their practices, teachings and manuscripts. Persian medical ethics was "modern" in speaking not only of the cognitive but also of the characters of good physicians (2,24). Greek culture shows a strong influence from the Persians and other more Eastern nations (2).

By the end of the fourth millennium BC, the two great river civilizations were Mesopotamia and

Egypt (25). The most famous Mesopotamian law code was Hammurabi of Babylon (1728-1646 BC) (25). The slate of this code (Figure 1) was one of the Iranian antic vestiges which are kept at the Louvre museum in Paris (26). Probably, the Code of Hammurabi (dating from about 1727 BC) contains the first recorded attempt by any culture to protect patients from incompetent doctors (27). In particular, it has punishments for guilty physicians (16, 26, 28).

Some say that health care ethics has a Hippocratic ethos (1). Hippocrates, who are known as the father of medicine, first introduced medical ethics to the world of sciences (29). He wrote an oath and so the "*Medical Law*" for medical practitioners. Scholars eventually showed that, despite tradition, this oath only appeared long after Hippocrates, and it flourished because it suited people with various ideas about ethics (23). The first concern of the Hippocratic Oath was to set apart those individuals prepared to submit to the discipline and standards of medicine. A second provision of the Hippocratic Oath is that one ought to act in the best interests of patients, or for their benefit or "to keep from harm and injustice"(1). Hippocratic Oath was revised in different periods by different persons and committees (30).

Investigations in the medical ethical values of ancient Persian culture have proved more fruitful (27). Zoroastrian priests had special emphasis and so supervision on physicians' practice. In the holy book of the Zoroastrians "*the Avesta*", a part entitled "*Vendidad*" contains some points about medicine and characteristics of physicians (31). The passage taken from the third book of the Sassanian Persian's encyclopedic, *The Dinkard*, characterizes in very specific terms the qualities of the ideal physician in sixth century AD (27,32). According to "*the Dinkard*" the best physician "...should know the limbs of the body, their articulations; remedies for disease;...should be amiable without jealousy, gentle in word, free from haughtiness; an enemy for diseases, but a friend for the sick, respecting modesty, free from crime, injury and violence; expeditious;...noble in action; protecting good reputation; not acting for gain, but for a spiritual reward; ready to listen;...possession of authority and philanthropy; skilled to prepare health-giving plants medically, in order to deliver the body from disease to expert corruption and impurity; to further peace and multiply the delights of life" (27).

Inspired by Islamic teachings, Muslim physicians have put much emphasis on ethical principles as a religious issue in their practices (21). The prophet of Islam, *Mohammad* (PUH),

has said: "I have been appointed as prophet of God for the completion and perfection of moral ethics" (*Al Mustadrak*, vol.2, p.282). Like other religious traditions, Islam, in answering the question "what ought or ought not to be done?" had a clearly defined sense of the sources of moral authority (33). In Islam, ethical decision-making is carried out within a framework of values derived from revelation and tradition; in other words, the broad ethical teaching of the Quran and the tradition of the prophet (34). In its initial phase, Islam was moved by a deep rational and moral concern for reforming society, and this moral intentionality was conceived in ways that encouraged a deep commitment to reasoning and rational discourse (33).

Given this religious emphasis on moral virtues, most of famous Muslim physicians in medieval have allocated parts of their books to the medical ethics. In the 9th century, *Abu al-Hasan Ali ibn-e Raban Tabari* (807-861 AD), described in his book "*the Paradise of Wisdom*" (Ferdous al Hekmat) the Islamic codes of ethics as: personal characters of the physician, his obligation towards patients, his obligation towards the community, his obligations towards his colleagues, and his obligations towards his assistants(3,35-37). This book was printed in Berlin by Professor *Edward Browne* in 1928(18). *Mohammad ibn-e Zakariyya Razi* (865–925 AD) was also strictly committed to the principles of medical ethics. He made some manuscripts on principles of medical ethics and so his book entitled "*Spiritual Medicine*" (Teb e Rohani) is about ethics. *Abu Ali al-Husayn ibn Sina* (Avicenna, 973-1037 AD), the well-known physician of the Islamic era, in his medical books has comprehensive moral advices about clinical medicine and physicians' practice. One of the most extensive works dealing with ethics was written in the 10th century AD by *Ishag ibn Ali al-Ruhawi*, a Christian who embraced to Islam (35,38). In his book, "*Ethics of a physician*" (*Adab al-Tabib*), the subjects such as the faith and the loyalty of physicians, problems of responsibilities, ethical dilemmas in patient-physician relationships, what the physician must avoid and beware of, manners of the visitors, medical art for the people's moral values, and harmful habits (35). This book translated to English in 1960s (39-40). The book "*Adab al-Tabib*" is an illustration of the fact that problems of responsibility, ethical dilemmas, and needs of the society are nothing new to medicine were brought(35).

In 931 AD, Caliph *Al-Muqtadir* ordered to examine all those who practiced medicine (10). From That time on, licensing examinations were

mandatory. Licensing Boards also supervised physicians' and pharmacists' practices. In 10th century, in addition to licensing, the Hippocratic Oath was mandatory for medical practitioners in Islamic hospitals. The medical recommendations of *Haly Abbas* to the contemporary physicians, known as "*Ahwazi Advises*", highlighted the ethics of medicine (21,29). *Ali ibn Abbas Ahwazi* has also included his exhortations in his book "*The Perfect Art of Medicine*" (Kamel al-sanaat al-Tibbia, or Ketab Al-Maleky) (21,29) exhortations based on testaments of Hippocrates, other physicians, and some of his own views for physicians and students of medicine. It is more comprehensive than the Hippocratic Oath. He has stated that: "I should say that he who wants to be a highly learned physician must act upon the testaments Hippocrates wrote in his time for the future physicians. Be pious and fear and obey God. Respect and serve and appreciate those who have taught you. Also, the physician must try to cure the patient with food and medication with no intention of accumulating wealth, but for spiritual rewards and charity. He must not give deadly medicine to anyone and must not talk about these drugs. He must not give to a woman an abortive drug, nor explain about it with others, the physician must try to keep the secrets of the patients confidential even more than the patients themselves. He must be popular, doing his best to cure needy patients. The daily amusement of a physician should be studying books, and pondering them, specifically medical texts. A student of medicine should be always at the service of skilled masters of medicine in the hospitals and clinics to serve patients, to be compassionate to them, and to compare what clinical signs and complications of sickness that he observes with those he has read in books, and to come to know about benign and malignant diseases..."(41).

For thousands of years, ethics have been recognized as an essential requirement for a physician in Islamic and Persian medicine (42). From the early 17th century onward, works of medical ethics (as distinct from medical etiquette) began to appear in the world (2). After introduction of modern academic method of medical education in Iran with the first college of medicine, "*Dar-ul-Fonoon*" in the nineteenth century (20) and the foundation of the Faculty of Medicine in Tehran University in 1934, education of medical ethics comprised a minor part of their education. Among the earliest textbooks written particularly for the course of medical ethics was a book entitled "*Medical Ethics and Customs*" in 1963 by Dr. Etemadian. In this book, issues such as; Doctor-

Patient relationship, confidentiality, abortion, euthanasia, medical vows, and medical ethics are discussed (21,43). An emphasis on ethics has been also voiced by medical and religious professions in Iran in recent decade (44-48). Some of the activities in the field of medical ethics that are carried out in current decade have been reviewed in other article (44). Establishment of the National Committee for Medical Research and Regional Committee of Ethics for Medical Research, and compiling the National codes of ethics in biomedical research are the main early activities carried out during 1990s. To encourage attention to medical ethics and to enhance the quality of health care in Iran, the Ministry of Health and Medical Education has introduced a comprehensive strategic plan for medical ethics in the national level in 2002 (49). Also, medical ethics courses were designed and developed by Ministry of Health and Medical education (MOHME) in approaching educational goals.

CONCLUSION

Medical history will thrive, and the past Universality of the healing role and the medical ceremony will continue to be a striking fact (23). Some believe that the major ideas that have shaped contemporary health care ethics arise from the western cultural traditions of Greece, Rome, and Christendom (1). Even, some believe that medical science rests upon a Greek foundation (23,50), but it is certain that it was very highly developed under the Islamic Empire (8). Between the epoch which stretches from Pythagoras to Plato and the epoch comprised in the seventeenth century of the modern world, nearly two thousand years has elapsed (51). This era was coincident with "*Islamic Empire*". For several centuries, the world has been witnessed and benefited from the great advances has provided by Muslim physicians in the era of been health sciences (42). Muslim physicians

had been great emphasis on ethics; therefore they would allocate part of their books on medical ethics. It must be mentioned that important role of Iranian Muslim physicians in the Islamic civilization and so in medical ethics empowerment in medieval era has been verified by numerous historians (14,7).

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Fig.1 Polished black diorite stele, (1792–1750 BC) found near Susa, with Code of Hammurabi inscribed and bas-relief at top showing king receiving laws from sun God Shamash (49).

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