

# Medical Ethics in Egyptian Fatimid Caliphate

#### Abstract

Medical ethics is one of the oldest and most important branches of applied ethics. Development of medicine and revolutions in human life as well as advancement of mental and physical health in human civilizations have led to great progress of ethical debates in this field of human sciences. Islamic civilization, as one of the dynamic and lasting human civilizations which promises Islamic spirituality in all aspects of mate rial life, could not possibly ignore medical ethics or an ethical approach to personal and public hygiene along with social health. In Islamic civilization, medical ethics is derived from Quran, Prophet Muhammad and Imam Ali's (PBUT) traditions. Ethics in medical profession can be classified under various branches, and its instances can be traced in different civilizations. Healthcare and hygiene comprise a vast collection of ethical topics, in which the issues of medical ethics, nursing ethics pharmaceutical ethics and ethical issues related to medical and social work centers are considered as its subcategories. In fact, medical ethics is concerned with issues related to the physician, his relationship with the patient and his close relatives, physician's interactions with other physicians, conditions and characteristics of the hospitals, monitoring medical centers and authorities in the field of healthcare, etc. This article seeks to study medical ethics in the Fatimid civilization which ruling Egypt from 358 to 567 A.H. In this regard, ethical issues in the area of healthcare and medical centers of the Fatimid Egypt as well as supervi sion over medical authorities will be taken into consideration and then

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distinguished Fatimid Egypt physicians in the field of medical ethics will be discussed.

**Key words:** Medical Ethics, Ethics, Fatimid Egypt, Muhtasib (Supervisor), Ibn Al Jazzar Al-Qayrawani, Ibn Rezwan

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### Introduction

Development of sciences in Egypt has been due to advancement and the flourish in these sciences during the Fatimid era. In this period, Egypt became powerful enough to compete with other Islamic regions in the field of medicine<sup>1</sup>. Fatimid caliphs summoned scholars to Egypt, favored and encouraged them and also supported the students. To manage the affairs of the scholars and students, a special judge had been hired. Students received food and facilities until graduation<sup>2</sup>. Various sources of income had been considered for students and physicians' payments<sup>3</sup> as well as wages for their services<sup>4</sup> and grants had been allocated for their education.

The Fatimids worked hard to advance medical sciences and as a result of caliphs' generosity, physicians came into possession of great property and were appointed to high government positions. It was to cure the diseases common in Egypt which caliphs really supported the physicians; they built, repaired or equipped many hospitals so that along with theoretical medical courses at scientific centers, students gained practical experience in these hospitals. In Egypt, like other Islamic countries, general medicine was practiced but some physicians diagnosed and treated internal, ophthalmologic and local diseases and also performed surgeries. One of the basic requirements for studying medicine was learning disciplines such as philosophy and foreign languages especially Syriac and Greek.

In Fatimid Egypt, a large number of scholars/physicians emerged, and medical sciences progressed during this period, just as philosophy did. During this era, physicians had numerous debates; their debates led to the advancement of medical science, broadening its horizons and increasing the number of books authored in the field of medicine.

The medical profession was somehow monopolized by the Dhimmis within the Fatimid territory; this can be verified by referring to the long list of physicians which Qefti mentions in his book *Akhbar al-ulama fi akhbar al-hukama* and *Ibn Abi Usibia* (595-668 A.H.) in his book *Oyun al-anba fi tabaqat* 

- 1- Kamel Hosain, 1963:66-87.
- 2- Ibid: 87.
- 3- Atta Allah, n.d.: 210, 214, 215.
- 4- Tamer, 1991: 202, 225.



*al-atiba*. With the establishment of *Dar Al-Elm* in Cairo in 395 following the example of *Dar Al-Hikma* in Baghdad, numerous scholars and physicians taught or studied at this scientific center.

Al-Hakem Biamrillah (Death 411 A.H.), the third Fatimid Caliph of Egypt, was keen on promoting sciences. In Jamadi al-Akhir of 395 AH, he founded Dar Al-Elm in Cairo following the example of Dar Al-Hikma in Baghdad. A number of scholars and physicians taught or studied at Dar Al-Elm. This place was rightly named Dar Al-Elm (literally; the house of science), because in this place numerous books were collected, and the most famous scholars in the fields of mathematics, logic and medicine were employed<sup>5</sup>.

Among distinguished figures in this era, Yaqub bin Kals (318-380AH/930-991), the famous minister to *Al-Muez* (Death 365 A.H.) and *Al-Azizi* (Death 386 A.H.) (the first and second Egyptian Fatimid Caliphs), was also influential in the advancement of medical science in the Fatimid Egypt. He had over four thousand guards including servants and owned slaves in his palace. In addition to these guards, he also had servants and handmaids at his court. He employed physicians to diagnose and treat the diseases of people as well as his servants. The required medications were mixed in the drug store of Ibn Kals's palace, and patients were not charged for the medication they were prescribed. In this period, many books were published by scholars, poets and physicians in the name of Ibn Kals<sup>6</sup>.

The issues that will be studied in this research include:

- 1- What effect did development of medical institutions in the Fatimid Egypt have on improving the quality of health in the Fatimid Egypt?
- 2- What effect did supervisory institutions in the Fatimid Egypt have on the ethics of medical authorities?
- 3- What were the accomplishments of medical ethics in the Fatimid Egypt?

### **Medical Ethics in Islamic Civilization**

Historical studies in various medical fields suggest that medical ethics has been considered by physicians in the Islamic civilization, and this particular attention has been due to the emphasis put by Quran as well as the conduct of Prophet Muhammad (PBUH) and Imam Ali (PBUH) to the extent that ethics in the medical profession can be divided into different categories and its instances in the Islamic civilization can be mentioned.

5- Abdulaziz Salem, 2002: 188.6- Tamer, 1991: 225.



7- Majlesi, 1949:382.

Medical ethics is one of the most important and ancient branches of applied ethics. Development of medical science and its impact on human life as well as development of the issues related to mental and physical health in human civilizations led to extensive evolution of ethical discussions in this field of human knowledge. Islamic civilization as one of the dynamic and lasting human civilizations that promises Islamic spiritualism in all the aspects of material life, could not ignore medical ethics and ethical issues in the fields of personal and public health.

Medical ethics in Islamic civilization originates from Quran as well as the conduct of Prophet Muhammad (PBUH) and Imam Ali (PBUH). Ethics in this profession can be divided into different categories and its instances in the Islamic civilization can be mentioned. Healthcare and hygiene comprise a large set of ethical issues including fields of medical ethics, nursing ethics, pharmaceutical ethics and ethical issues related to medical and social welfare centers. In fact, medical ethics discusses issues related to doctors and their relationships with patients and their families, their interaction with other doctors, conditions of hospitals, supervision over medical institutions and healthcare officials, etc.

It is crucial to consider the principles of Islam in all areas including medicine, in order to make progress in the path of scientific and ethical perfection; because Islam is an ethical religion and the Prophet Muhammad's mission was to perfect moral virtues; "My mission is to complete moral virtues"7. The ethical points included in the medical oath are limited to the ideas of previous philosophers such as Hippocrates. But ethical instructions and points are comprehensively manifested in the Hadiths by Prophet Muhammad and the Imams, which as the principles of Islamic medical ethics, can be sued as a suitable complementary to or alternative for the existing principles, calming the patient and considering the mediating role of the physician in treating the diseases (Quran: "He is the God who heals me when I am sick."), piety, compassion and seriousness in medical profession, sense of responsibility, perception of urgency in treatments, keeping patients' secrets, the necessity of expertise and experience (Prophet Muhammad emphasized that "if a physician does not have full knowledge of medical science, he must not interfere with medical issues and if he does so, he will be responsible for the fate of the patient." He also ordered that between a knowledgeable and a more knowledgeable physician, the more knowledgeable one must be selected for treat-



ment of the patient.8

Influenced by the teachings of Islam, medical ethics in Islamic civilization has been of particular significance and it has been even included among other religious sciences. Some of the well-known Muslim physicians have also authored books on general and medical ethics. *Muhammad bin Zakariya Al-Razi* (251-313 A.H.) wrote a book entitled *Altib al-rowhani*<sup>9</sup> and *Avicenna* (370-428 A.H.), the famous eastern physician and philosopher, wrote a book entitled *Fi elm al-akhlaq*. The oath and advice of *Ali bin Abbas Ahvazi* (Death 383 A.H.), the distinguished physician of the fourth century, are also noteworthy.<sup>10</sup>

One of the characteristics of medical profession in Islam is its harmony with other aspects of human philosophy. As a matter of fact, medicine and pharmaceutics in the East have never been considered as professions by great figures such as *Razi* and *Avicenna*<sup>11</sup>. Moral piety and expertise in the medical profession were considered two essential components of medical profession and in fact, Muslim physicians were theologians and philosophers even before being physicians. In other words, the medical practice of *Razi* and *Avicenna* was a combination of logic, astronomy, mathematics, physics, chemistry, biology and psychology and rooted in ethical and humanistic principles<sup>12</sup>.

In the fourth essay of his book, The Four Essays, Nezami Aruzi (Death 560 A.H.) the famous physician, literary figure and physician of the sixth century A.H., discusses medical science and guidance of physicians: "Medicine is a profession by which health of human body is maintained and when a sickness occurs, health is restored and [the physician] must have long hair and clean face and put on perfume and be genial. Yet, the physician must be friendly to all, heal the souls [and] be good-tempered and wise, and any physician who does not honor human beings, is not compassionate, and if he does not know logic, he cannot heal souls and if he is not supported by God, he will not have a good intuition, and if he does not have a good intuition, he will not attain knowledge..."<sup>13</sup>.

In the 5th century AH/11th century A.D., Yabrudi, (Death 427 A.H.), one of the distinguished physicians of Damascus formulated regulations and rules for the medical profession which were observed precisely by the physicians of the city. Based on these regulations, physicians had to be healthy, intelligent, and wise and have a good memory. They had to keep both their body and clothes clean and never betray their

- 8- Ibn al Qayem Jozeh, 1949: 203.
- 9- Mohaghegh, 1970: 155, 156.
- 10- Anonymous, 2005: 40-42.
- 11- Mohaghegh, 1970: 156.
- 12-Ibid.
- 13- Anonymous, 2005: 42.



patients' trust in them. Their interest in treating the patients had to be more than their eagerness to receive fees. Their sole purpose could not be treating the patients, but rather, they had to educate them. They had to be trustworthy and not prescribe poisonous drugs or instruct patients how to use them. They were forbidden to perform abortion, and they were required to treat friends and enemies equally<sup>14</sup>. Moreover, medical students had to learn logic first<sup>15</sup> and then learn ethics to purify their souls.

## **Charity and Endowment Medical Centers in Fatimid Egypt: An Example of Medical Ethics**

Fatimids inherited the heritage of cultured and scienceloving governments such as Tulunians and Ikhshidids, and furthered their civilization and scientific development. In the Fatimid period, hospitals actively provided healthcare services; Al-Atiq Hospital in Fustat was built by Ahmad bin Tulun and in the Fatimid period was still actively providing healthcare services. According to Mogrizi<sup>16</sup>, at this hospital, patients were given garments and then they were treated; food and medication were provided to them. At this hospital, for the construction of which sixty thousand dinars had been spent<sup>17</sup>, in addition to slaves and soldiers, everybody including the rich and the poor were admitted. Every Friday, Ibn Tulun visited the hospital and addressed the issues. This hospital is highly important in the history of medicine and psychiatry. Kafur, the fourth Ikhshidid Emir, established a hospital named Al-Asfal in Fastut in 346 A.H. 18. Al-Atiq Hospital was fundamentally renovated and expanded during the reign of AL-Aziz Billah; hospital wards became more equipped so that after the collapse of the Fatimids and during the Mamalik period, this hospital was one of the main buildings in Fastut which was still operating<sup>19</sup>.

In the Fatimid era, both hospitals constructed during the Tulunid and Ikhshidid periods, were still actively providing services. During this period, there was a well-equipped, consecrated hospital in Fastut. Fatimid Caliphs supported *Al-Atiq* Hospital by providing sufficient equipment and abundant financial resources so that they might fulfill their duties of serving the rich and the poor alike. This hospital continued to provide healthcare and educational services for almost four centuries. *Safli* Hospital was built in 346 A.H. Storage of food, narcotics and sedatives, in addition to necessary equipment were sufficiently available at the hospital drugstore. Also, at this hospital, a large library and confer-

- 14- Ziade Nicola, 1972: 127, 128.
- 15- Ibn al Qayem Jozeh, 1949: 205.
- 16- Moghrizi, 1997; Ibn Tavir, 1992: 130-131.
- 17- Qalqashandi, n.d.:372
- 18- Ibid: 392.
- 19- Ibid: 397.

ence halls were built to promote medical science education. At these hospitals, as patients were treated, medical students were also trained and advanced in their career<sup>20</sup>.

The clinic of *Al-Atiq* and *Safli* hospitals were also active; after a brief examination, a prescription was given to the patient and hospital drugstore provided the medication<sup>21</sup>. If the doctor decided that the patient had to be hospitalized, he was referred to the related ward; for instance, internal diseases, orthopedics, surgery, ophthalmology, etc. and was hospitalized at special wards<sup>22</sup>. The number of doctors and staff was proportionate to the number of patients. Doctors had hierarchical ranks at the hospital. There were more male doctors and a few female doctors and midwives. Some sources mention the scarcity of resources for the treatment of gynecological diseases. In some cases, in addition to a competent male doctor, a female doctor or midwife also visited the female patient so that the male doctor would not have to touch the patient<sup>23</sup>. Nursing services were very advanced. It seems that a team comprising of healthcare department manager, charitable donations collector<sup>24</sup> (lawyer), supervisor, auditor and janitor served at the hospitals.

Al-Qashashin Hospital<sup>25</sup> was another healthcare center in Egypt which was located near Al-Zahra Mosque. This place was converted into a mint house during the ministry of Ma'mun Bataehi, the Minister of Al-Amr bi Ahkam Allah (Death 524 A.H.). Al-Seqtiyin Hospital was located in Seqtiyin bazaar outside Bab Al-Zavileh, one of the entrance gates of Cairo<sup>26</sup>.

Multiplicity and variety of hospitals and mental asylums throughout the Islamic civilization is an obvious fact; a rather well-equipped hospital existed in almost every city. With increasing development of Islamic governments, governmental and charitable medical centers multiplied. All these institutions provided free services to the patients and their expenses were either paid by the government or benevolent wealthy people. Yet, what is noteworthy is that the expenses of these hospitals, mental asylums, old houses and orphanages were paid by the government or wealthy people, and they were often managed by endowments. In one of the palaces in Cairo, a hospital was established which was run by a manager or guardian. Each patient had a bed and was examined by a physician every day. Nurses checked on the patients several times a day and provided them with necessary food and medication. Near this hospital in another old palace, there was a women's hospital in which female physicians and nurs-

- 20- Hamarneh, 1979: 3-4.
- 21- Abi Osaybi'a, n.d.: 243.
- 22- Ibid: 561.
- 23- Elgood, 1985: 182.
- 24- Ibid: 240.
- 25- Ghani, n.d.:123.
- 26- Abi Osaybi'a, n.d.: 562.



es worked<sup>27</sup>. Special physicians worked at mental asylums. Male and female mental patients were also separated. Each patient was taken care of in a small room. Each room was lighted through an iron window. In Alexandria, there was a hospital where Spanish patients or redeemed captives were taken care of. Ahmed bin Tulun hospital in ancient Cairo was equipped for the same purpose.<sup>28</sup>

For some diseases such as madness, Muslims had built special hospitals and, as is common today, they had established charity associations which on certain days, cured and took care of the poor patients for free. These associations occasionally sent medication and physicians to some places where hospitals could not be built<sup>29</sup>.

### Monitoring Hygiene and Medical Practice: An Indication of Medical Ethics in Fatimid Egypt

One of the indications of professional ethics in the Islamic civilization is monitoring public services. In the medical profession, monitoring health and medical workers is also an indication of applied ethics in the field of health and medicine.

In Egypt like other Islamic regions, a "head physician" or "Muhtasib" supervised the medical practice of the physicians. Although little information is available regarding the responsibilities of a head physician, some books had been written to guide Muhtasibs<sup>30</sup>. Prior to the sixth century AH, such books (Hsbh books) mentioned the medical profession only briefly and mostly discussed drugs and doses. Shaizari (died 589 AH), a physician who worked in Aleppo, wrote a book in which physicians had been required to take Hippocratic Oath.<sup>31</sup> One of the most important duties of a Muhtasib was to carefully monitor sanitation of production machines and their tools and accessories as well as the market and shops of various artisans<sup>32</sup>. In order to monitor medical practice, hsbt and ihtisab (literally calculation), which were applied in other professions, were also devised and implemented in the field of medicine and scholars who have written books about hsbt, also wrote a chapter on hsbt in medicine.<sup>33</sup>

In his book, *Nihayat al-Rotba*, Shaizari dedicates a chapter entitled "fi al-hsbt ala al-atiba va al-zohalin va al-mojberin va al-jarahin" to hsbt of physicians, ophthalmologists, orthopedists and surgeons and states that physicians must be tested based on the content of Hunayn's book entitled "*Mihnat al-Tabib*" and ophthalmologists based on his ten treatises on eye and orthopedists based on Paul's konash and surgeons based on Galen's and Zahravi's books.<sup>34</sup>

- 27- Ibn jobayr, n.d.: 24
- 28- Mazaheri, 1969: 257.
- 29- Lobon, 2007: 614, 615.
- 30- Refer to hsbt books such as: al-hsbt fi al-islam aw vazifat al-hokumat al-islamiya by Ibn Taymiyah, ma'alem al-qorba fi al-ahkam al-hsbt by Ibn al-Akhvah and nahayat al-rotba fi al-tib al-hsbt by Ibn Basam and Shizari, Abdurahman Nasr, nahayat al-rutbah fi tib al-hsbt, etc.
- 31- Shizari, 1946: 97.
- 32- Ibid: 98.
- 33- Ibid: 99.
- 34- Ibid: 100.

35- Abuzayd, 1986: 210.

Ophthalmologists were tested based on Hanin ibn Eshaq's "al-ashr magalat fi al- ayn" (ten treatises on eye) and orthopedists based on the Arabic translation of the chapter on surgery in the book by Paul of Aegina and surgeons had to know the contents of a particular book by Galen. Later hsbt books repeated these requirements, but there is little evidence available to show whether these tests were taken strictly. Also, it has been emphasized that a physician received a "license" after graduation, but there is no evidence of the existence of an equal, standardized or supervised system in medical education, although today copies of some treatises are available at the end of which a person has signed and testified that a certain student has read and understood a certain text in the presence of its author or a respected physician. Such testimonies are not equivalent to a license which a physician receives following graduation from an approved educational course, and the term "license" is not found in such documents.

Muhtasib also appointed an expert to supervise pharmacists, an expert who was familiar with their tricks and inspected their drugs every week, advised them and intimidated them by the threats of punishment.

Muhtasib was supposed to test ophthalmologists based on Hanin ibn Eshaq's (189-259/809-873) "al-ashr maqalat fi al-ayn" (ten treatises on eye). Whoever passed the test and could describe eye layers, glands, three types of moisture and the diseases associated with them as well as the method of mixing eye drugs and how to prescribe them was allowed to treat patients.<sup>35</sup>

This monitoring of public health and medical practice was in fact one of the reasons for the development of public health system in Fatimid Egypt and indicates the importance of health and hygiene for Egyptian citizens. It also led to growth in the areas of personal and public health. It should be admitted that his and monitoring health, hygiene and medical practice in Islamic civilization is a point of honor which led to the growth of medical science and its related branches all over the Islamic world. During the fourth, fifth and sixth century A.H., with the same approach to medicane, medical supervision and establishment of medical centers, the Fatimid Egypt played a pivotal role in scientific authority of Islamic civilization.

### **Ethical Physicians in Fatimid Egypt**

Medical and pharmaceutical services to Arab inhabitants and Barbarian tribes in the North of Africa reached their height



during the Fatimid era. This progress can be observed in the works of *Abu Ja'far Ahmad bin Ibrahim bin Abu Khaled bin Al-Jezar al-Qirvani* (290-369 AH). His father and uncle were also distinguished physicians at the Fatimid court. *Ibn Jazar* was preeminent in promoting medical education and practicing medicine and was the most distinguished physician in the court of caliph *Al-Moez* in Qirvan and later in Cairo.

More than thirty books in the fields of history, biography, geography, philosophy and other related subjects are ascribed to Ibn Jazir, but most of them have been lost. Among surviving works are the seven brief medical treatises entitled zad al-mosafer va gut al-hazer. In the introduction of this book, Ibn Jazar mentions the greatest ancient physicians (especially Hippocrates, Rufus of Ephesus and Galen) and then, shares his vast knowledge of pathology and treatment of the diseases of each organ of the body from head to toe, and due to his all-comprehensive knowledge, he leaves behind a work which can benefit both the patients and the medical students. This book was a manual for educating medical students, a glossary of medical terms for the physicians and a medical guide for travelers to remote rural places (hence the title "zad al-mosafer") where a physician could be rarely found<sup>36</sup>

The book of home remedies, *tib al-foqara*, consists of 58 chapters and contains all the previous Greek and Arabic sources. It is a book for patients who are in need of medical treatment but cannot afford to purchase expensive medication and medical costs. The book concentrates on introducing inexpensive and accessible drugs, their compositions and also suggests ways to protect health. This book discusses treatments for various diseases of head, ears, teeth as well as stomachache, cough, asthma and hoarseness of voice and offers useful and accessible methods for preparing various kinds of medication. The author even suggests sublingual tablets which are still prescribed in the modern era.

In chapter 22, the author discusses children's health prior and after birth and up to adolescence including issues such as choosing a nurse, milk and nutrition, children's hygiene, mother and child's healthcare and children's normal growth. His works on the habits of children and focused training for maintaining and promoting children's health are useful. He stresses the importance of studying pediatrics in the interdisciplinary branches of medicine, healthcare and expresses regret that the issue of children's health has been ignored and takes firm steps in advancing this field<sup>37</sup>.

36- Hamarneh, 1979: 4.37- Ibn Jazar Qirvani, 2009: 3.

Abulhasan Ali bin Rezwan (died 453 A.H.); Abulhasan Ali bin Rezwan bin Ali bin Jafar was born and grew up in Giza, Egypt. He learned medicine and became a skillful physician, mathematician and astronomer<sup>38</sup>. Ibn Abi Osiba'eh had a manuscript by Ibn Rezwan in which he had stated that, according to Hippocrates, a physician had to have the following characteristics<sup>39</sup>:

- Shapely, healthy, intelligent, noble-minded, wise, having a good memory and being good-natured
- Well-dressed, pleasant smelling and observing cleanliness of body and clothing
- He must keep the patients' secrets and does not reveal them
- He must be more interested in curing the patient than getting paid and more eager to treat the poor than the rich
- He must be greedy in learning knowledge and benefiting the public
- He must have a good heart, avoid lustful looks and be honest
- He must not show interest in women's lives or what he sees in patients' houses and must never desire them
- He must protect people's lives and properties; he must not prescribe lethal drugs that he does not know or abortion drugs. He must cure his enemies with a good intention, just as he cures his friends<sup>40</sup>.

Although his childhood was spent in poverty and hardship, through hardworking and perseverance, he became the head of Egyptian physicians. Ibn Rezwan also became distinguished among his peers in other Islamic lands such as Baghdad and Cordoba.

The medical revival in Egypt was to some extent due to the efforts of Ibn Rezwan. His observations and experiences with diseases contributed to medical science in Egypt. Ibn Rezwan compiled his experiences and practically rectified widespread deviations from medical ethics and implemented reforms in the area of medical ethics. Ibn Rezwan did not seek material gain in his profession, and all his efforts were aimed at becoming skillful. He was a humanitarian physician who did his best to help the needy and the poor. He did not wish to amass wealth and his ethical determination to observe these principles made him a perfect physician in the Islamic civilization<sup>41</sup>. During the period when he was the head of the physicians' guild in Cairo, Ibn Rezwan stated that: "A physician must heal his enemies with the same enthusiasm and readiness as he treats his friends"<sup>42</sup>. Ibn Rezwan believed

- 38- Ibn al-Arabi, 1998: 268.
- 39- Abi Osaybi'a, n.d.: 562.
- 40- Mohaghegh, 1994: 274.
- 41- Abi Osaybi'a, n.d.: 562.
- 42- Montasab Mojabi, 2006: 125.



that, besides high intelligence, medical students had to consider goodness in their profession.

In the fifth century, hot debates took place between two important physicians. Ali bin Rezwan (376-460 A.H.) was a self-made physician who was very selfish and bad-tempered. Al-Mustansir (Death 487 A.H.), the Fatimid caliph, appointed him as the head physician at the court and he gained great political power in Egypt. He also wrote several treatises including the book Daf Mazar Al-abdan Biarz Mesr, which discussed the climatic features of Egypt and their relationship with hygiene and public health, especially cholera. When Ibn Butlan, the Nestorian Christian from Baghdad who had been trained by the eminent physician of that time, entered Fustat, Egypt in 441 A.D.<sup>43</sup> and criticized Ibn Rezwan's position and theory, ten pungent essays were exchanged between them, which became increasingly harsh and poignant. Apparently, their debate was about a topic in Aristotelian biology; but in fact, their motivation was animosity as well as the desire to gain (or preserve) a higher social status. Finally, Ibn Butlan was compelled to leave Egypt; but instead of returning to Baghdad, he first went to Constantinople and then to a monastery and became a monk. Ibn Butlan wrote a medical hand--book for the use of the monks, a treatise about diagnosis of diseases in slaves for sale, a satirical essay about the flaws of physicians and other medical personnel (Da'vat al-atiba) and a book entitled *Tagvim Al-seha*. In the latter book, which was enthusiastically embraced by the professional physicians; he listed 210 herbal and animal drugs as well as seventy other items which were good for preserving health in 40 tables. Apparently, neither Ibn Butlan nor Ibn Rezwan was aware of Avicenna's book entitled Oanun.

Ibn Butlan also wrote a treatise in which he addressed Ibn Rezwan and argued with and criticized him<sup>44</sup>.

*Ibn Abi Osaybe'a* compares two physicians, namely, Ibn Rezwan and Ibn Butlan Baghdadi and states: "*Ibn Butlan* was very eloquent. He was polite in his speech. But, Ibn Rezwan was more knowledgeable in science and philosophy"<sup>45</sup>. The debates of these two physicians have are recorded in five books<sup>46</sup>.

Ibn Rezwan was a distinguished scientist and a skillful physician which made him superior to all his contemporary physicians. He frequently rejected or modified the ideas of the preceding physicians and in some cases, he accused them of ignorance in medical discussions and criticized them. Scholars who were criticized by him included Hunayn bin Ishaq,

- 43- Fadai araghi, 2004: 92.
- 44- Ibn Alebri, 1998: 268.
- 45- Abi osabaeh, n.d.: 562.
- 46- Atta Allah, n.d.: 210

Abi Faraj bin Tayeb, Ibn Butlan's (Death 455 A.H.) teacher, and also *Abi Bakr Muhammad bin Zakariya Al-Razi*<sup>47</sup>.

Ibn Rezwan had an ugly birthmark on his black face<sup>48</sup>. He wrote an essay on mocking a person who has a physical defect. In this essay, he states that a scholarly physician does not need to have a pretty face. Ibn Butlan Baghdadi frequently referred to Ibn Rezwan's ugly face. Ali bin Rezwan was called timsah alhan because he had an ugly face and was foul-mouthed<sup>49</sup>. When old, Ibn Rezwan suffered from dementia. It has been reported that during the reign of *Al-Mustansir* the Fatimid, famine occurred in Egypt; and in 447 A.H. life became really difficult and the orphan child which had been adopted by Ibn Rezwan and lived in his house stole precious objects, gold and twenty thousand dinars and fled. Ibn Rezwan's health was affected by this incident, and he eventually died in 453 or 460 A.H.50. The ideas of Ibn Rezwan and his hostility with others had a great impact on his contemporary physicians and philosophers. Ibn Rezwan had students who learned sciences and medicine from him<sup>51</sup>.

### Conclusion

A survey of the history of medical ethics indicates that what so far has been discussed as medical ethics can be summed up in three fundamental principles of piety, compassion and seriousness, which are derived from Quran, Prophet Muhammad and Imam Ali's words. These principles along with other valuable and important points from Quranic verses and Imams' words, serve as the basis for teaching medical ethics and formulating more comprehensive oaths in the light of Islamic teachings. Islamic civilization, as a dynamic and lasting civilization has paid special attention to this aspect of medical science, just as other branches of this science.

The Fatimid Caliphate, as an Ismaili Shiite government, distinguished characteristics in Islamic civilization. The establishment of this government in the North of Africa and paying attention to religious issues and ethical education among its followers as well as emphasizing rational, philosophical and esoteric models in promoting religious beliefs indicate the importance of ethics in this caliphate. Establishment of governmental institutions in the area of public, personal and social health and supporting healthcare authorities financially and spiritually in the Fatimid Egypt indicates the spirit of medical ethics. According to historical sources, in their palaces, Fatimid caliphs had established special places called *Dar Al-Sharab*, in which distinguished pharmacists of

47- Abi osabaeh, n.d.: 562.

48- Ibn Alebri, 1377: 268.

49- Atta Allah, n.d.: 210

50- Ibn Alebri, 1998 : 269.

51- See: Introduction Maykel Doles in Tranalait of Islamic Medicine in the Middle Ages, pp. 54-66.



Islamic countries produced and mixed various drugs. These drugs were provided for the poor for free, and during frequent epidemics of cholera or plague due to droughts which occurred as a result of depletion of Nile water, these medications were quickly provided for the charity hospitals in Egypt. Egyptian hospitals provided free medical and nursing services to the patients. As a result of the support of Fatimid caliphs, just as the support of the rulers of other regions of Islamic civilization, physicians emerged who paid special attention to professional and applied ethics in medical science who taught and wrote on medical ethics.

Supervision over public health and medical centers was in fact one of the reasons for the development of the civil system and healthcare in Egypt during the Fatimid era which shows the sensitivity of health and hygiene for Egyptian citizens which provided the context for the growth and development of individual and public health. During the fourth, fifth and sixth centuries A.H., the Fatimid Egypt adopted the same approach to medical science, medical supervision and construction of medical centers and took a valuable step for promotion of medical ethics in healthcare sector.

Generally, the achievements of medical ethics in the Fatimid Egypt can be summarized as: writing and compiling jurisprudential, ethical and philosophical books that paid special attention to ethics in healthcare. These books, which were based on the teachings of Quran, Holy Imams and the ethical principles derived from the books written by the physicians of the prominent ancient civilizations, laid the basis of medical ethics in Islamic civilization.

In addition, continuous efforts made for the construction of medical centers, which was the fruit of Islamic civilization for all the nations in this part of the world, was invaluable and noteworthy. The Fatimid dynasty in Egypt, as a significant and influential state in the realm of the Islamic civilization, not only inherited the heritage of Tulunians and Ikhshidids in the field of construction of hospitals and medical centers, but also became the pioneer of Islamic civilization in the construction of scientific and healthcare centers.

In Fatimid Egypt, training, support and recruitment of seekers of knowledge from all over the Islamic world as well as special attention to medical science education, in addition to fulfilment of the needs of Egypt due to its geographical and climatic condition, provided the context for training eminent doctors and scholars and writing scientific books in the field of medicine and medical ethics, treatment of various diseases

and also expertise and specialty in treating certain diseases.

Eminent doctors arose in the Fatimid Egypt who, in addition to skillfulness in the field of medicine, were able to promote and practice medical ethics. Among these doctors, *Ibn Jazar Qirvani* and *Ibn Rezvan* are mentionable.

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