



PS-3-03-09-2018

Islamic Medical Ethics in the Modern World

Dr. Mohamed Albar FRCP(London).
Medical Ethics Center International Medical Center
Jeddah, Saudi Arabia
Email: MAIbar@imc.med.sa

Abstract

Medical technology has given rise to the critical need for expansion of the bioethical field to keep up with medical practice and research while relating the ethical decisions to their religious sources and reliable medical knowledge. Muslim bioethicists are struggling to keep pace with and produce answers to the questions posed by the medical establishment. Islamic sources that are utilized by Muslim legal scholars in deducing appropriate rulings on various medical cases on which bioethicists around the world have offered solutions and Islamic rulings in various controversial fields of modern medical practice and research will be discussed. Human affliction goes beyond the technicalities of who can afford to pay for expensive treatment. In the developing world, in most cases, healthcare institutions are professionally geared toward maintaining a culture of treatment for those who can afford it. Contemporary Bioethics integrates Islamic textual resources with medical information in order to provide careful analyses of the political, economic, and cultural terrains that are necessary for bioethicists to effectively promote social justice. In the Muslim world, as in any part of the globe, advancements in biomedical technology has meant a number of new issues in the medical treatment and procedures that impinge upon Islamic values as taught by the Qur'an and the *Sunnah*. Muslim ethicists should examine a number of judicial decisions made by Muslim scholars in response to the growing number of cases in the clinical settings as well as national health policies adopted by various Muslim governments in the last decades. Ethics examines the rightness and the wrongness in human conduct, virtue and vice, the good and the bad, and so forth in the larger global context. In short, it addresses the ethical epistemology and forms of justificatory reasoning. Sources of common principles of morality and ethics unite all human beings in understanding the difference between moral and immoral. The Islamic Morality and Ethics builds on The Qur'anic principles viz: Intuitive nature (*al-fitr' a*), Reason (intellect, mind, *al-'aql*) and Revelation (*wahy, Tanzil*).

Keywords:

Introduction

In the Muslim world, as in any part of the globe, advancements in biomedical technology has meant a number of new issues in the medical treatment and procedures that impinge upon Islamic values as taught by the Qur'an and the *Sunnah* (the Tradition of Prophet Muhammad). Our investigations in bioethical issues require Muslim ethicists should examine a number of judicial decisions made by Muslim scholars in response to the growing number of cases in the clinical settings as well as national health policies adopted by various Muslim governments in



PS-3-03-09-2018

the last few decades. The field of bioethics is new even in the Western countries where its principles and rules are being worked out in a standard approach to secularly mediated resolutions of morally problematic issues regarding, for instance, embryonic inviolability or end of life decisions in connection with terminally ill patients. For several centuries, the world, and particularly Europe, has benefited from the great contributions made by Muslim physicians in the field of medicine. These contributions were not only based on technical skills but also on the role of eminent Muslim physicians in establishing medical ethics. Many prominent physicians of the Islamic civilization involved themselves with professional ethics; among them were al-Ruhawi, and al-Razi (Rhazes). Both wrote the earliest and most thorough books on medical ethics over a 1000 years ago [1].

Ethics examines the rightness and the wrongness in human conduct. Human conduct is informed by moral principles which determine the outcome of particular acts or activities. Ethics is concerned with examining human conduct and, therefore, it seeks to find ways of predicting practical aspects of human activity by investigating moral problems, practices and policies in professions, situations, and public policy. In other words, ethics is concerned with applications and in this sense bioethics is a branch of applied ethics concerned with resolving problems in the area of living sciences, including research and practice in the field of medicine.

In this study, we use Ethics and morality refer to norms about right or wrong in human conduct that are so widely shared in a certain society. These norms differ, at least in details, from one society to another, and from one era to another in the same society. However, many principles, rules and virtues remain constant across different cultures and different times. For instance, almost all persons know that lying, stealing and killing an innocent person is immoral; and veracity, fidelity and saving a human life is a great virtue and a highly commended moral act. Our interest in this book is to discuss the sources of common principles of morality and ethics to show that commonality unites all human beings in understanding the difference between moral and immoral. This is the scope of our first chapter, where we explain and elaborate:

1. Intuitive nature (*al-fitr' a*): This is a fundamental Qur'anic idea, which speaks about the basic nature of all human beings by which human beings can discern certain things to be morally right (honesty, truth telling, doing good, benevolence, etc.) and certain things to be wrong (lying, cheating, stealing, killing an innocent person or being unjust).
2. Reason (intellect, mind, al-'aql): God endowed humanity with the ability to use reason to differentiate between right and wrong, and to discern the proper course of action. Those who refuse to use their minds and follow their egotistic desires, and blind themselves with self-importance follow their instincts and hedonistic desires and deviate from the true path, becoming unable to minimally distinguish right from wrong. To be sure, even if they know the truth of the matter, they are inclined to follow their carnal desires and lust for material ends and tramp over whatever remains of their conscience. The Qur'an extols humanity to strive to control egotistic and hedonistic desires, and it deplores those who are arrogant, mischievous and having insatiated desire for wealth and power, which they use to crush the poor and weak. Muslim theologian, Abu Hamid al-Ghazali, has admonished people correctly when he says: "If you cannot reach the level of Angels, then do not fall into the level of beasts, scorpions and snakes [2]." We will have more opportunity to cite the Qur'an and the



PS-3-03-09-2018

Sunna, in addition to theological and philosophica heritage of Islam, when we undertake to elaborate this point further.

3. Revelation (*wahy, Tanzil*): Muslims believe that all communities had received Allah's (God's) guidance through revelation given to the Prophets and Messengers of God. In Islam, Adam is not only first human being; he is also the first Prophet who delivered God's message of monotheism to his descendants.

It is important to state from the outset that Muslims do not believe in original sin. Adam committed an act of disobedience by eating from the fruit of the tree which God had ordered him not to eat. According to the Qur'an, he and his wife, Eve, repented and God accepted their repentance and they became pure. God bestowed on Adam and Eve and their children His Grace and Blessing "We honored the progeny of Adam, provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favors above a great part of Our creation" (Qur'an/17:70). Furthermore, Muslims believe that God sent to every nation and people, prophets and messengers to guide them to worship one God and follow the path of righteousness. In other words, Muslims believe in all these prophets and that they brought the same religion in its essence, and worshipped only one God. This belief is the source of unity among human beings under the unity of God's religion, which is essentially the same. However the followers of these religions distort God's religion and bring back polytheism in different forms and shapes, by changing the pristine clear messages of the prophets altering the good teachings with adulterated misconceptions both in theology and morality. It is significant to note that, as the youngest of the monotheistic traditions, Islam addresses the whole humanity and respects all the prophets from Adam to the last Prophet Muhammad and considers all nations to have witnessed God's uncompromising unity confirmed in all the messages and teaching of God's true envoys on earth. Belief in God's unity (Tawhid) is the basis not only for Muslim theology; but it is also the basis of morality and ethics in Islam. Karen Armstrong in her book, *A History of God* explicates this point about the relationship between ethics and belief in one God. According to her, "the assertion of unity of God (Tawhid, monotheism) is not only a denial that deities were worthy of worship. To say that God is one is not just a mere numerical definition; it is a call to make that unity the driving factor of one's life and society" [3]. In another place she observes: "In practical terms, Islam meant that Muslims had a duty to create a just, equitable society where the poor and vulnerable are treated decently. The early moral message of the Qur'an is simple: It is wrong to stockpile wealth and build a private fortune, and it is good to share the wealth of society fairly by giving a regular portion of one's wealth to the poor" (Holy Qur'an Surah 92/18, Surah 9/103, Surah 63/9, Surah 102/1) [4].

Some Important Concepts Related to Islamic Legal-Ethical Tradition in this Study

The Shari'a: (lit. "a way or well-trodden path to a source of water") refers to the normative religious law of Islam with the Qur'an and the Sunna (The Tradition of Prophet Muhammad including his sayings, acts and approvals) as its sources. The norms of the Shari'a are immutable, since they have supernatural source in God's revelation for humankind. Islamic jurisprudence (al-fiqh) engages in understanding (lit. sense of the word fiqh) of these revealed texts and



PS-3-03-09-2018

formulating rules and rulings to cover all human activity in the area of human-God relations ('ibadāt) and human-human relationships (mu'amalat). In Islamic rulings acts are classified as obligatory, recommended, permissible, reprehensible, and forbidden.

1. **Obligatory Acts:** The research in and understanding of the revealed texts makes it possible to declare certain acts as required (fardh, wajib) and certain other acts as recommended or even forbidden. The rule of thumb is that where there is a clear command in the Qur'an or the Sunna (for instance performing the five daily prayers) then performance of that action becomes obligatory. Obligatory acts include paying the annual alms (zakat) to the poor, fasting during the month of Ramadan between dawn and dusk for a month; performance of the annual pilgrimage—the Hajj, once in a lifetime, if he/she has got the means to perform it.
2. **Recommended Acts:** These are the acts that are performed as supererogatory acts (mustahab, mandub). It includes all those acts that are good to perform, but they are not required. For instance, it is recommended to fast on Mondays and Thursday every week. Likewise, on certain important days of the Muslim calendar, it is highly recommended to perform extra prayers and fasting. Those who perform these acts are rewarded for their piety by God. But if they cannot, for any reason, perform them, they do not become blameworthy.
3. **Permissible Acts:** These acts are neutral and permissible (mubah) in the sense that whether one performs them or not, it does not matter since they constitute neither blame nor recrimination. It includes all daily life activities. Everything is allowed unless there is a clear text prohibiting it. This is also equivalent to the legal presumption of innocence until the proof of guilt is established. Things are presumed allowed in the absence of prohibition.
4. **Reprehensible Acts:** These acts, although better to avoid (makrooh), do not constitute blame or sin. It simply requires a person to think before performing it since there is no clear order of avoiding it. Certainly, being reprehensible, if avoided then God would reward the person for abstaining from it, but will not punish the person who did it.
5. **Forbidden Acts:** These are forbidden explicitly in the Qur'an or the Sunna (haram). If a person performs such an act, then he/she will be punished either in this world or in the hereafter, unless he/she repents. Repentance is direct between God and human, and He (God) accepts repentance at any time except at the time of death when it is too late.

Islamic jurisprudence (al-fiqh) consists of two sets of inquiry: one set of inquiry deals with case studies (furu'), and the other relates the cases to the legal principles and precedents derived from the foundational sources of Islamic tradition (Usul). These include:

- a) **The Qur'an:** Muslims believe that the Qur'an contains the revelation that the Prophet Muhammad received directly from God. Accordingly, it is regarded as the most authentic source of religious and moral directives that can be extrapolated to formulate judicial decisions touching all practical matters in everyday life of the community.
- b) **The Sunna:** This source consists of all the sayings, deeds and silently approved directives and prescriptions provided by the Prophet Muhammad. This is collectively known as the



PS-3-03-09-2018

“Tradition” in the forms of hadith –reports that describe the context in which certain rulings were made by the Prophet and reported by his contemporaries including his close associates. After the Qur’an, the Sunna serves as the most important source for deriving legal-ethical rulings in Islamic jurisprudence.

- c) The Ijma’: This is the consensus of the companions of the Prophet after his death on certain issues not found in the Qur’an and the Sunna. In the later period this consensus included the agreement of the learned scholars, the ulema, who are regarded as the most learned and most pious to render their opinions in the form of their collective agreement. However, as the Islamic world spread all over the different regions, it became difficult to garner the agreement of all Muslim scholars.
- d) The Qiya’s: This is analogical reasoning that allows the jurists to extrapolate fresh decisions from a case already known through the Qur’an or the Sunna which shared similarity with the new case for which the solution had to be found.

Besides the four well-recognized foundational sources for legal-ethical decision-making which were accepted by legal scholars belonging to different Sunni legal schools (Hanafi, Maliki, Shafi and Hanbali), the jurists belonging to specific schools had recognized subsidiary rules and principles based on the Qur’an and the Sunna to resolve practical questions. Among these well-known rules and principles are:

1. *al-Mas’ a lih’ al-Mursala* (unrestricted public interest and benefit): This was formulated by the Maliki (1) jurists who justified this principle on the basis of the public and personal interests of the people. The principle was also accepted by the Hanbali jurists as legitimate since it was based on the Qur’an, the Sunna, scholarly consensus and analogical reasoning.
2. *al-Istih’ sa’ n* (bases of juridical preference): This was formulated by the Hanafi jurists. It simply means that under a given research one can prefer one ruling over the other through analogical deduction, by comparing its final solution and its practicality. It is important to keep in mind that Muslim jurists accepted these two principles as long as they did not contravene the foundational sources like the Qur’an and the Sunna.
3. *al-Istis’ h’ a’ b* (presumption of continuity): This rule was developed to provide the assumption of continuity of a ruling if nothing to nullify it had occurred. Hence, if one were ritually clean to undertake any religious obligation that required such a state, and if a person knew that he/she were in such a state then he/she can continue to assume the state of purity, unless the contrary were proven. This rule also applies to the presumption of innocence until proven guilty.
4. The principle of *‘Urf or ‘A’ da*: This is a major source of problem resolution that embodies considerations based on custom, tradition or local habits. This category includes all the professional codes and practices pursued by specialists in the field. Nevertheless, ‘urf is accepted as a source of judicial decision making so long as there is no provision of the matter in the revealed texts (the Qur’an or the Sunna).
5. *Sadd al- Dhara’i’* (blocking the means): is another reasoning procedure that some jurists considered to be a source of legislation, especially in the Maliki school. Most jurists do



PS-3-03-09-2018

not mention blocking the means as separate rule, but included its denotation in *al-mas'alah*, that is, public good.

The basic primary sources of Islamic jurisprudence have been elaborated sufficiently in the context of this study. To be sure, these principles are expounded to discover and promote the objectives of the sacred law of the *Shari'a*. It is important to proceed to discuss the major objectives and aims of the *Shari'a*. These are (1) preservation of faith (*al-di'n*), (2) preservation of life (*al-nafs*), (3) preservation of mind (*al-'aql*), (4) preservation of honor (*al-irdh*) and (5) Preservation of Property (*al-mal*). It is important to underline the fact that these aims of Islamic teachings are related to medical practice and research. They were studied to guide both the physicians and the community in matters that were open to ethical and legal evaluation in the modern times.

Chronology of Bioethical Issues that were Resolved Through Legal-Ethical Juridical Methodology

A number of issues in the field of bioethics which include questions regarding abortion, organ transplantation, in vitro fertilization, end of life issues, advanced directives, stem cell research, brain death, genetic engineering, genetic finger printing and so forth. These are all new questions that faced the Islamic scholars in the second half of the 20th century and the beginning of the 21st century (C.E.). As the growing literature shows Muslim jurists have been active in studying these contentious subjects and providing religious and ethical guidance in the form of *fatwas* (religious decisions) that are followed by healthcare providers in the Muslim world. As far back as 1959 *fatwas* appeared from Grand Mufti of Egypt on corneal transplantation and blood transfusion. A similar fatwa was issued by the Grand Mufti of Tunisia in 1959. At the same time a number of rulings were issued on organ transplantation that continued until 1990. Leading juridical authorities in different centers of Islamic learning participated in formulating religious responses to the growing problems created by phenomenal advancement in biotechnology and medical practice. Following this early interest in bioethical issues the governments of the region formed an advisory body that functioned under the Organization of Islamic Countries (OIC). The *Majma'al-Fiqh al-Islami* (the Islamic Juridical Council of the Muslim World League in Mecca) discussed many critical issues in medical ethics, published *fatwas* and studies on these subjects in its quarterly journal, which was published from the beginning of the third session 1980 CE/1400 AH on the subject of contraception. The following year in 1981 the Council issued rulings regarding the use of alcohol, porcine material and blood in medicine. In 1982, the Council reviewed in vitro fertilization which took almost 3 years to investigate different aspects of the subject.

In 1985 organ transplantation was studied and different aspects of this subject and brain death continued to be studied until 1987. In 1987 post mortem and anatomy were given a thorough review. The subject of inter-sex and trans-sex was discussed in 1989. In 1990, the Juridical Council studied the subject of abortion with specific reference to congenital anomalies. In the same year they studied the interference of the husband in preventing his wife from taking certain medications or accepting certain surgical procedures. Many judicial decisions and regulations from the Ministry of Health in Saudi Arabia reiterated that an adult competent lady is



PS-3-03-09-2018

the one who should give consent to therapy. The husband, father, brothers or sons cannot give consent in her name so long as she is a competent adult. However, in matters of reproduction a mutual decision and consent from both the spouses was necessary.

In 1992, the Council discussed the use of umbilical cord blood and placenta for medical purposes and research, making it permissible for the larger good of the society. In 1995, the regulations for exposure of private parts (*awra*) especially of females, in hospitals, operating room (OR) and so forth were studied to provide the ethical guidance in that situation. In 1998, the DNA fingerprinting, the paternity disputes, the genetic engineering were carefully discussed to allow for pre-natal genetic testing and related issues. The Council also studied the use of animal gelatin investigating its sources to determine its permissibility in pharmaceutical production. In 1999 medicaments containing alcohol, narcotics and anxiolytics, were discussed to understand the need to permit their content in some of the life-saving medications, and when definite need is apparent.

As the biotechnology was moving toward understanding the pluripotent stem cells and their use in replicating organs and tissues, it was in 2003 that the Council discussed the legality of stem cell research, hereditary blood diseases and porcine heparin. The gender selection was studied in 2006 and 2007. In 2010, the jurists studied the separation of conjoined twins and its complications. The meeting in December 2012, 21st session, studied the end of life issues and postponed issuing the rulings on the matter until further clarifications were provided by the medical professionals. In the same year issues related to the early marriage of girls and its medical complications, the minimum and the maximum period of pregnancy to deliver a viable fetus were scrutinized. It postponed the decision on early marriage (before 18 years old) until further discussions and studies are forwarded. The minimum period of viable pregnancy is settled in Islamic jurisprudence, as 6 lunar months from consummation of marriage, since the time of the Sahaba (companions of the Prophet Muhammad PBUH), but the question of maximum period of pregnancy was always a bone of contention. The Majma agreed that the maximum period of pregnancy is 1 year from the last cohabitation between married couple. However the judge should decide on the case. The Majma (21st session), December 2012 also discussed the power of the guardian when he is not acting in the best interest of the person under his custody, and decided that the custody (guardianship) should be given to another person. In case of emergency, the health provider should act immediately to save the life or organs of the minor or incompetent. The guardian should not expose any person under his custody to any danger or research which is going to harm the minor or the incompetent. If he insists on this act, he should be replaced by another guardian through the court. The decision for medical or surgical treatment in all these contentious cases should be decided by a trustworthy medical committee.

The second important corpus is the International Islamic Juridical Council under the Organization of Islamic Countries (OIC) which represents all Islamic countries. The organization has studied medical issues and ethical problems since its inception in 1985 when they studied assisted reproduction, in vitro fertilization, milk-banks for babies, and instruments for resuscitative measures in situations like brain death. In the latter case, the discussion went on for two sessions when rulings were issued on these matters. The 1986 ruling on brain death was a



PS-3-03-09-2018

landmark decision since it equated brain death with cardiac and respiratory death. It opened the way for cadaver transplants. The ruling was passed in October 1986 and by November of that year the first case of cadaver (brain death) transplant occurred in Saudi Arabia for kidney transplantation.

In 1988, a detailed ruling on organ transplantation was issued, which clearly rejected any trading or trafficking of organs and stressed the principle of altruism. However, the Council allowed governments to encourage organ donation by awarding medals, services or even a certain fixed amount of money to compensate for loss of earning and suffering during the preparation and donation of organs. In 1990, the Council discussed transplantation of nerve tissues, transplantation from anencephalics and transplantation from aborted fetuses and left over pre-embryos from IVF projects. Stem cell research was discussed by the Council in 2003. It also studied transplantation of internal and external sexual organs. Whereas the Council allowed transplantation of uterus (womb), it refused transplantation of gonads (ovaries and testes) as they carry all the genetic materials from the donor. In addition, it also rejected the permission for external sex organs transplantation. In Jeddah, a surgeon transplanted a womb from one woman to another in April 2000, but the operation failed and ended in a disaster, as there was no prior experimentation on animals.

The Council also discussed contraception and sterilization in 1988. In 1992, it studied the consent in medical and surgical cases, and the futile cases when there was no hope for cure. In 1993, it discussed the traffic accidents (the highest world figures are from Saudi Arabia and Gulf Countries). It also discussed confidentiality in health services, the liability of the medical and healthcare professionals, the opposite sex health professionals, and the HIV cases which were discussed more elaborately in 1995. In 1997, it discussed problems of fasting during illness and the drugs that may affect fasting and its route of administration. Cloning was also discussed in 1997, along with slaughtering of animals for food. In 2007, lengthy discussions took place on plastic and cosmetic surgery and a number of rulings were issued on these subjects. In 2009, the emergency medicine was discussed with its problems of consent of minors and adults, and in pregnant women, and the emergency of doing caesarian operations to save the baby. In September 2012, the Council discussed genetic engineering and genetic fingerprinting and genetic diseases, but did not issue any rulings on these matters.

The International Islamic Juridical Council OIC re-discussed the issues on genetic in its 21st session held in Riyadh 18–22 November 2013, and studied the recommendations of the seminar held in Jeddah in 23–25 February 2013 regarding the human genome, genetic engineering, genetic counseling, genetic surveys, premarital genetic testing during pregnancy and after delivery. It passed a detailed Fatwa on all these issues after lengthy discussions, with the physicians and genetics'. The International Islamic Juridical Council also discussed in this session (21st) 18–22 November 2013 the following issues and passed Fatwas on them:

1. The use of prohibited substances e.g. alcohol, porcine material or any other prohibited “Najas” substance after changing its composition, which ends in a new substance differing from the original one e.g. change of alcohol (acetyl alcohol) into acetic acid (vinegar). The Majma made Fatwas, recommendations and asked for further studies in dubious substances and issues.



PS-3-03-09-2018

2. The slaughtered animals after being electrocuted with non fatal electric shock. The Majma reiterated a previous Fatwa No 3/10 of 1995, and recommended detailed procedures that certify an Islamic slaughter of a living animal, which was not already dead by electrocution.
3. The huge responsibility of those causing traffic accidents both under the Shari'a law and in the Day of Judgment (Hereafter).

The Council policy is to consult physicians, scientists and religious scholars by writing to them on the specified subject long before the meeting. The research work is distributed to all attendants, usually prior to the time of discussion, then a physician or scientist makes a resume of the scientific papers and a religious scholar makes a resume of the religious papers. The discussions are recorded. All the data along with the rulings are published in their quarterly journal (actually many volumes for each session have already been published). It includes all the subjects discussed during the sessions of that year and is printed (usually a few years after the session). CDs were introduced in the late nineties and continued into the new millennium. The subjects are varied on economics, financial matters, social problems, family problems and public domain including medical and health problems. They get involved in astronomy to decide the beginnings of lunar months, and so forth. The literature produced covers issues of wide scope and scholars have asked separate publications according to the subjects and domains discussed. Because of the legal language of these articles physicians and scientists have not made any use of these voluminous books. There have been recommendations to publish CD-ROMs with necessary glossary to explain technical language of the publications so that more specialists can use this valuable literature on medical ethics. To elaborate on the substance of this important publication the articles treat the subject from different angles: scientific, ethical, religious (theology) and jurisprudence, discussing both the objectives of the Shari'a, the juridical methodology providing juristic arguments in support of one or the other ruling.

The third important corpus in studying medical and ethical perspective is the Islamic Organization for Medical Sciences of Kuwait. It held its first conference in January 1981, under the rubric of Islamic Medicine. Subsequently, it held five conferences of wide participation from many Islamic and Western countries. It searched medical jurisprudence, history of Islamic medicine, the Hippocratic and Oath of a Muslim physician, and so forth. In addition, the organization held numerous symposia on selected topics related to the medical advancement and the moral dilemma that this phenomenal progression had caused in clinical setting. The attendants included Islamic scholars (Ulama), physicians and scientists. Among the topics that were discussed in these symposia, include: the legality of milk-banks gender selection, technically assisted reproduction, surrogacy, sterilization, abortion, and so on. With the advancement in biotechnology, topics like brain death, "do not resuscitate order", trans-sex and inter-sex found interest among Muslim religious scholars and medical professionals. The organization published the proceedings of these conferences and symposia, a book on Islamic Code of Ethics, a large volume on alternative medicine, a volume on ethics of research and a number of studies on history of Islamic medicine. The work of the Organization was also recognized by the international health organizations like WHO, ISSCO, UNESCO and the International Islamic Juridical Council OIC and the Islamic Jurisprudence Council of Mecca



PS-3-03-09-2018

(Islamic World League) and the World Medical Association, with whom the organizers collaborated in holding several joint sessions and meetings.

The fourth significant source for medical jurisprudence and Islamic bioethics are the rulings of the Grand Muftis of Egypt which have been collected and published in many volumes along with subjects including medical and health issues. Some authors have collected the rulings on medical and health issues and published them. For instance, Abdulaziz Abdulmohsin published the rulings of Saudi scholars on medical issues. There are numerous books and booklets authored by different medical and legal scholars on specific issues dealing with, for instance, organ transplantation, methods of assisted reproduction (in vitro fertilization), plastic and cosmetic surgery, stem cell research, cloning, abortion, sterilization, liability, the medical codes, blood transfusion, allowed and prohibited medicine, the fasting of the ill, the pregnant and lactating woman and so on. The topics also include ritual matters such as the performance of ritual prayers during illness and so forth. There are many Masters and Ph.D. thesis in many Universities about these subjects which may be important in these fields This extensive literature is mainly in Arabic, and Malay Language, some in Persian, Urdu and Turkish languages; in English and other languages.

Notes and References

1. Chamsi-Pasha H, Albar MA (2013) Islamic medical ethics a thousand years ago. *Saudi Med J* 34(7):673–675
2. Al Ghazali, A *Ihya 'Uluom al-Din. Kitab 'Aja'ib al-Qalb*, vol 3/9, Beirut Dar al-Ma'rifah(nd)
3. Armstrong K (1993) *A history of god*. Baltimore Books, New York, p 151
4. vide supra, pp 142–143