

## Contemporary Topics in Islamic Medical Ethics

Alexander Woodman Ph.D. (c), M.P.H., M.Sci. *Prince Sultan Military College of Health Sciences, Dhahran, Saudi Commission for Health Specialties, Al Khobar, Saudi Arabia; alexwoodman.ucla@gmail.com*

Mohammed Ali Albar MD, FRCP *Director of Medical Ethics Center, Department of Medical Ethics, International Medical Center, Jeddah, Saudi Arabia; malbar@imc.med.sa*

Hassan Chamsi-Pasha MD, FRCP, FACC *Consultant Cardiologist King Fahd Armed Forces Hospital, Jeddah, Saudi Arabia; drhcpasha@hotmail.com*

**Correspondence:** Alexander Woodman Ph.D.(c), M.P.H., M.Sci. | Prince Sultan Military College of Health Sciences King Fahad Military Medical City | Al Amal Dhahran 34313, Saudi Arabia | Tel. +966 13 840 5480 | alexwoodman.ucla@gmail.com

### Abstract

The Islamic guidance on practical issues related human life in particular can be sought in Islamic medical ethics. Medical ethics is known for its controversial issues . The most important aspects of Islamic medical jurisprudence may be the rules on the new methods and techniques provided by tremendous advances in medicine and the moral changes of the societies.

The aim of this paper is to highlight the Islamic view on commonly encountered issues in medical ethics, and explore their applications in daily practice.

### Introduction

Islam holds that ethics cannot be divorced from morality and ethics are not to be split from law. Islamic law is a compendium of ethics, morality and legal rules. Islam considers medical ethics the same as ethics in other aspects of life.<sup>1</sup> Contemporary issues such as that related to fertilization, and termination or prevention of pregnancy, organ transplantation, end of life issues, stem cell research and cloning etc. should be clearly discussed and presented to the health care providers.

In this paper, we have highlighted the importance of knowledge and understanding of the Islamic rules on different emerging issues in medical ethics and explored their applications in daily practice. Once equipped with such knowledge, it may be possible for the health care provider to move forwards, and deal with the ethical problems faced in real-life with more confidence.

### 1. Abortion

In Islam, the core of the family unit is the cornerstone of society and marriage is the only acceptable way of procreation. Procreation is considered to be a spiritual act of worship and anything that may put the pure progeny in danger is prohibited.

Abortion, defined as the termination of a pregnancy before the infant can survive outside the uterus, has always been a sensitive issue in the Islamic world. It is interesting to note that the three most prominent religious groups; Judaism, Christianity, and Islam have very strict ethical rules regarding a highly controversial issue like abortion. Life is the divine creation of God and ending a life, especially that of a child is strictly prohibited. Muslim laws do not specifically designate the title of a human being for the embryo until the 'ensoulment' which occurs in the 120th day from the time of the fertilization of the ovum (i.e., conception).<sup>2</sup>

Although Islamic teachings support the act of procreation, temporary means of contraception are not prohibited within the state of wedlock with the consent between the spouses.<sup>3</sup> Sterilization is strictly forbidden, except for medical purposes when a pregnancy would seriously endanger the life or the health of the expectant mother.

In almost every Muslim country, abortion is prohibited except in the case of a medical situation when the pregnancy could endanger the life or health of the expectant mother or when there is a severe congenital anomaly found in the fetus.<sup>2</sup> If the malformation is untreatable, unmanageable and very serious, then abortion may only be carried out prior to the 120th day of conception (calculated from the day of fertilization, not from the last menstrual cycle). Beyond 120 days, (i.e., after the ensoulment,) abortion is only allowed if there is a danger threatening the mothers' life and not only her health.<sup>4</sup> The decision to abort would be made by a committee of at least three knowledgeable physicians who present clear medical indications.

Furthermore, some jurists agree that the rules related to abortion should be extended to incidents like rape. There are many Fatwas penned by the Islamic Fiqh Council of Islamic World League, Makkah Al Mukaramah, the International Islamic Fiqh Academy of Organizations of Islamic Conferences and other organizations which permit an abortion following rape. The law states that it should be carried out within the first 40 days of pregnancy.<sup>2,3,4</sup> No school of Islamic jurisprudence has permitted abortion as a means of birth and population control, or to avoid economic hardships. In the Islamic world, there is a strict punishment for anyone using any means to cause a miscarriage. The person responsible for the crime must pay an indemnity (1/20 of adult diyah) to the woman's family.

## 2. Assisted Reproductive Technology

In the Qur'an, it is said that "wealth and progeny are an adornment for the life of this world."<sup>5</sup> Since Islam strongly supports a high fertility rate, it is permissible to seek a remedy for infertility as it is not acceptable to adopt a child. The Islamic rule is quite clear; infertility does not make anyone less of a man or a woman.<sup>6</sup> It is encouraged to implore God for a suitable blessing.

All types of reproductive technologies are acceptable in Islam if they involve the semen, ovum, and the uterus of a legally married couple.<sup>7,8</sup> The determination according to law is that if there is no cure for infertility, it should be accepted.

Assisted Reproductive Technology (ART), which makes it possible to use a donor's sperm to have children, is prohibited according to Islamic law. Furthermore, the international practice of ART that involves sperm, ovum, and embryo donation is incompatible with the Islamic

worldview.<sup>9</sup> Surrogacy is forbidden in Islam.<sup>10</sup>

In Vitro Fertilization is permitted under the Islamic law in cases where the following conditions are met: the couple should be married, the process should use the sperm of the husband and the eggs of the wife, the marriage should be authentic at the time of the process, and the team carrying out the process should be competent and professional in order to avoid any chance of mistake.<sup>8,9</sup>

The appropriate number of fertilized eggs should be transferred to the uterus. It is common to transfer two or three eggs. It is permitted to freeze the remaining fertilized eggs for the future use for the same purpose by the same couple if they are still married when the process takes place. In case of divorce or the husband's death, it is prohibited to use the preserved sperm. What about the fate of remaining eggs?. The rule in Islam allows the eggs to be used for research purposes with the consent of the couple. However, and as early as 1990, the International Islamic Fiqh Academy of Organizations of Islamic Conference declared its position and refused the premise of freezing eggs since there is even a remote chance of mixing between gametes or preembryos.<sup>3</sup> The wife is allowed to use the sperm of her imprisoned husband to impregnate through artificial insemination.

Gender selection for medical reasons is permitted. However, it is not allowed to choose the sex of the fertilized ovum for social purposes.<sup>9,11</sup>

## 3. Ethical Issues in Genetics

Genetic and congenital disorders are more common occurrence in Arab states than in industrialized countries.<sup>12</sup> There are several reasons attributed to this high rate of genetic disorders:

- High consanguinity rate, 25-60% marriages are between relatives.<sup>13</sup>
- The prevalence of widely spread disorders like hemoglobinopathies, glucose-6-phosphate dehydrogenase deficiency, autosomal recessive syndromes, and other metabolic disorders.
- The birth of children with Down's syndrome is higher in Arab countries as compared to the industrialized ones. It is thought that this disorder is in part, the result of the fact that older women living in rural areas continue to give birth. The higher age is thought to lead to the birth of a Down's syndrome child. Late pregnancy in the West can increase the Down's syndrome but they usually resort to abortion to avoid the birth of Down's syndrome babies.
- The lack of public health measures, such as premarital counseling, especially in poorer countries, may contribute

to the higher rates of genetic and congenital disorders, and the failure to assist affected pregnant with new techniques such as preimplantation genetic diagnosis technique during pregnancy. Such services are sometimes forbidden because of cultural, legal or religious limitations.

In several Arab states, it is mandatory to undergo a premarital medical examination. There may be cases when the couple would be advised not to marry. However, the final choice is theirs. The positive outcome of this process is the reduction of autosomal recessive blood disorders.

A pre-implantation genetic diagnosis is allowed in Islam if a third party is not involved in the process. This process decreases the risk of having a baby with a genetic disease and consequently avoid abortion.<sup>14</sup>

The Islamic position towards genetic engineering stresses its usage for disease prevention, disease treatment, obtaining benefits in agriculture and food industries, and to do no harm to the society and the environment.

Cloning is also prohibited in Islam. It is acceptable, however, to use genetic engineering and cloning in the field of microorganisms, plants, and animals if the result would be more beneficial than harm.<sup>15</sup>

Although stem cell research is allowed in Islamic countries, the creation of an embryo for the purpose of research is prohibited. In stem cell therapy, a bone marrow transplant is used to treat blood disorders such as leukemia, thalassemia, etc. Stem cell research used for therapeutic purposes is permitted if they meet certain conditions. These are: having the full consent of the adult and the guardian in the case of children, the permission of the parents to use the placenta or the umbilical cord, if a fetus is aborted; and if the leftover zygotes remain after In Vitro Fertilization (IVF).<sup>2</sup> All of these conditions are acceptable as long as they cause no harm. Any illegally received material cannot be used for the research.<sup>16</sup>

The ethical issues and Islamic view related to mitochondrial replacement therapy and Gene Germline editing using CRISPER-Cas 9 technique, will be discussed by the Islamic Fiqh Academy of the Organization of Islamic Conference in their meeting to be held in Dubai on 4-6 November 2019.

#### 4. End-of-Life Ethical Issues

In Islam, mercy killing, euthanasia, is prohibited even if a patient chooses that path and the family members agree with that decision. Life is considered to be a sacred virtue and only God can end the life of a person. No one is allowed to deliberately end his life, or that of another human being. Saving a life is encouraged, and reducing suffering with analgesia is however acceptable, even if, in

the process, death is hastened.<sup>17</sup> Research on this subject denies the effect of morphine to cause death, if it is given in the proper dosage.

Many companions of the Prophet Muhammad (PBUH) refused therapy in their last illness, as they felt it would be futile, e.g., Abubaker Assidiq - the First Caliph. When it was clear that his life was reaching an end, he refused treatment with what he called 'useless treatments.' His wish was not to be treated and that request, which was honored, was in no way equated with him taking his own life. Furthermore, a Muslim person cannot commit suicide since God is the one who gives and takes life. It is believed that transgressors are responsible for their actions and will be punished in the Judgment Day.<sup>17, 18</sup>

Allowing a patient whose case is considered futile to die by not providing a ventilator or withholding cardiopulmonary resuscitation is not the same as killing a person. The Islamic concept concerning Do Not Resuscitate (DNR) decision has been clarified by the Presidency of the Administration of Islamic Research, Riyadh, KSA, in their Fatwa No. 12086 issued on 28/3/1409 (1989). The Fatwa states that: "if three knowledgeable and trustworthy physicians agreed that the patient condition is hopeless; the life-supporting machines can be withheld or withdrawn. The family members' opinion is not included in decision-making as they are unqualified to make such decisions".<sup>19</sup> Preventing nutrition and hydration to a person is regarded as a form of murder according to the Islamic jurisprudence. The practice of holding the nutrition and hydration in a patient may lead to a painful death.<sup>20</sup>

#### 5. Organ Transplantation

Organ transplantation is not a new process; it has been used by Muslims for centuries. The use of an animal bone from a slaughtered (Halal) animal or from a corpse (Carcass) or of porcine origin, are allowed when there is no other alternative. A personal view of Zakaria Al Qazwini (600-682H/1203-1283AD), a grand Judge in Iraq, stressed that the porcine bone is better and more functional for transplantation than any other xenografts.<sup>21</sup>

Religion is an integral part of the Muslim society, and continues to have an essential role in decisions regarding organ transplantation. Several Fatwas, stating the details about the permission of organ transplantation have been issued.<sup>22</sup>

Even after the departure of soul and confirmation of death, the body should be respected; mutilation is not permitted. Cremation is prohibited as well. The body should be buried as soon as possible to avoid putrefaction. If an organ is removed from a corpse, the benefits should clearly outweigh the harm. A person cannot donate his/her vital organs since it can cause death/suicide which, in Islam, is

as much a crime as a homicide and is one of the greatest sins one could commit. If the donation does not cause much harm and a patient's health can benefit from it, it is encouraged to be an organ donor. In the Islamic belief, the donation is viewed as an act of charity, altruism, and a genuine love for humans.<sup>4,23</sup>

During the 20th century, Muslim jurists sanctioned blood transfusions, although blood is considered to be Najas (unclean). In 1986, during the Third International Conference of Islamic Jurists, the participants passed a resolution which defined brain death and equated it to cardiac and respiratory death.<sup>3</sup> This decision provided the possibility to expand organ transplantation projects which included only living donors. In 1990, during the Sixth International Conference of Islamic Jurists, the participants discussed the issue of genital organ transplantation. They prohibited the transplantation of gonads since they are the carriers of the primary genetic material from the donor. Despite that finding, they sanctioned the process of transplantation of other internal sex organs.<sup>3</sup>

In his editorial, Kaf Al-Ghazal<sup>24</sup> pointed out that the issue of organ donation still remains an incredibly important one attracting a lot of discussion amongst medics, ethicists, healthcare policymakers and wider society. It stimulated a lively debate within the Muslim community in UK with a recent positive shift towards organ donation.<sup>24</sup>

The practice of organ trading is prohibited in Islam. No financial incentive to the donor or his relatives for giving his organs. The government, however, can encourage donation by giving medals and special services to the donor and their families.

There should be no cost to the family of the donor for removing the organ and any permanent harm to the donor must be avoided.<sup>4</sup>

Organ donation should be made in accordance with the living donor's wishes and intentions and his/her decision should be thoroughly respected. In case of death of a person, his family can make a decision for organ transplantation. It is also permissible for a Muslim to donate or accept organ/s from a non-Muslim.<sup>25</sup>

## 6. Brain Death

According to Islamic belief, there is no true consensus about brain death. Some equate it to cardiopulmonary collapse; others consider it something between life and death when the life support should be continued.<sup>26</sup> Death in Islam is the departure of the soul from the body. The soul remains eternal, but it will be chastised or eulogized until the resurrection day when it will reunite with the body and go to Paradise or Hell. Death is the result of the permanent loss of brain functions. The loss can occur as a result of either an intracranial cause like major trauma

or hemorrhage or from an extracranial cause such as cardio-respiratory arrest. Three primary criteria medically determine death and provide complete evidence regarding the final diagnosis. They are: somatic (external features on the body), circulatory (after cardio-respiratory arrest), and neurological (patients in a coma on mechanical ventilation).<sup>27</sup>

In Saudi Arabia and several other countries, in addition to the stringent clinical criteria used for the diagnosis of brain death, there are specific criteria that has to be observed in the case of brain death. The electroencephalogram (EEG) of 30 min duration should be silent, and there is a suggestions to confirm the absence of blood flow to the brain as determined by a Doppler, cerebral angiogram, computed tomography (CT) angiography or magnetic resonance imaging (MRI) angiography etc.<sup>28</sup>

In the Fatwa of 1982, the Senior Religious Scholars of Saudi Arabia discussed the issue of organ donation received from living as well as deceased patients. The Fatwa of the Islamic Fiqh Academy of the Organization of Islamic Conference (October 1986) provided a legal definition of death in Islam: either an individual has sustained total cessation of cardiac and respiratory functions and it is irreversible or there is permanent complete cessation of all cerebral functions and the brain is disintegrating.<sup>3,28</sup>

Although guidelines are available in many countries to standardize national processes for the diagnosis of brain death, the current inconsistency in practice make it imperative that an international consensus is developed. This should clarify the criteria for the determination of brain death and provide specific instructions about the clinical examination. It should also stipulate the role and type of confirmatory investigations and detail the required level of documentation.<sup>27</sup>

Islamic juridical deliberations around brain death largely took place over 30 years ago in response to medical developments and ethical controversies in the Western world. The debates within Muslim bioethics need updating and deepening concerning the early rulings on brain death.<sup>29</sup>

## Conclusion

Religion is an integral part of a Muslim's life. Among health care providers, there is a definite need for more awareness of Islamic medical jurisprudence. Muslim caregivers are required to think through bioethical issues from an Islamic point of view. In daily practice, the Islamic rules on several ethical issues should be clear and concise to the health care providers. A Simple booklet containing recent version of the Islamic code of ethics, common ethical dilemmas, and currently evolving ethical issues should be available for all health professionals treating Muslim patients.

## References

1. Jarallah J. Islamic Medical Ethics How Different? Journal of Taibah University Medical Sciences. 2008;3,1:61–63
2. The Islamic Jurisprudence Council of the Muslim World League. Available from: <http://themwl.org/downloads/Resolutions-of-Islamic-Fiqh-Council-1.pdf>. ( Accessed Sept, 16, 2019)
3. International Islamic Fiqh Academy decrees available from: <http://www.iifa-aifi.org/cs..> .( Accessed Sept ,16, 2019)
4. Al-Bar MA, Chamsi-Pasha H. Contemporary Bioethics: Islamic Perspective. New York (NY): Springer; 2015. <https://link.springer.com/book/10.1007/978-3-319-18428-9>
5. The Holy Qur'an 18:46
6. Rodini M. An Investigation on Islamic perspective on the reproductive technologies. Webmed Cent Int J Med Mol Med. 2012; 3(7): WMC003548
7. Fadel HE. Prospects and ethics of stem cell research: an Islamic perspective. J of Islamic Med Association of North America. 2007.39(2): 73-84
8. Serour , G.I . (2013) . Ethical issues in human reproduction: Islamic perspectives. Gynecological Endocrinology , 29 , 949 – 952 .
9. Chamsi-Pasha H, Al-Bar MA. Assisted reproductive technology: Islamic Sunni perspective. Human Fertility. 2015; 18(2): 107-12.
10. Hathout MM. Surrogacy: an Islamic perspective. J of Islamic Med Association of North America. 1989; 21(3): 105-106.
11. Athar S. Enhancement technologies and the person: an Islamic view." J of Law, Med & Ethics. 2008; 36(1): 59-64
12. Rajab AA, Al-Hazmi MA. The Gulf Cooperation Countries genetic services. Understanding individuals, families, and community needs. Saudi Medical J. 2007; 28(9): 1321-23.
13. Al-Gazali L, Hamamy H, Al-Arrayad S. Genetic disorders in the Arab world. BMJ. 2006; 333(7573): 831-34.
14. Alsulaiman A, Al-Odaib A, Al-Rijjal, Hewison J. Preimplantation genetic diagnosis in Saudi Arabia: parents' experience and attitudes. Prenatal Diagnosis. 2010; 30(8): 753-757.
15. Fadel HE. Developments in stem cell research and therapeutic cloning: Islamic ethical positions, a review. Bioethics 2012, 26(3): 128-35
16. Al-Aqeel Al. Human cloning, stem cell research. An Islamic perspective. Saudi Medical J. 2009; 30(12): 1507-14.
17. Chamsi-Pasha H, Albar MA. Ethical Dilemmas at the End of Life: Islamic Perspective. J Relig Health 2017 56(2): 400-10
18. Ahaddour C, Van den Branden S, Broeckeaert B."God is the giver and taker of life": Muslim beliefs and attitudes regarding assisted suicide and euthanasia. AJOB Empir Bioeth. 2018 Jan-Mar;9(1):1-11.
19. Permanent Committee for Scholarly Research and Ifta. (1989). <http://www.alifta.net/Fatawa/FatawaChapters.aspx?View=Page&PageID=299&PageNo=1&BookID=17>. Accessed July 14, 2017.
20. Albar MA, Chamsi-Pasha H. Artificial nutrition and hydration. International Journal of Human and Health Sciences.2017;1,1
21. AlQazwini Z. Ajayib AlMakhlohat. Wonder of creatures. 3rd ed. Beirut: Dar AlAfaaq AlJadidah; 2001
22. Albar M. Organ transplantation: a Sunni Islamic perspective. Saudi J Kidney Dis Transpl 2012; 23(4): 817-22.
23. Chamsi-Pasha H, Albar MA. Kidney transplantation: ethical challenges in the Arab world. Saudi J Kidney Dis Transpl. 2014 May;25(3):489-95.
24. Kaf Al-Ghazal S. Editorial. JBIMA .2019 (August) .Volume 2. <https://jbima.com/article/jbima-editorial-volume-2-2019-august/>
25. Majlis al – Urubbili al – Ifta' waal-Buhuth, al – Qararat Wafatawa. Dar al – Tawzai wa al – Nashral – Islamiyya. Resolutions and Fatwas [cited by Ghaly M., 2012].
26. Padela AI, Arozullah A, Moosa E. Brain death in Islamic ethico-legal deliberation: challenges for applied Islamic bioethics." Bioethics. 2013; 27(3): 132-39.
27. Gardiner D, Shemie S, Manara A, Opdam H. International perspective on the diagnosis of death." British J of Anesthesia. 2012; 108(1): i14-i28.
28. Chamsi-Pasha H, Albar MA. Do not resuscitate, brain death, and organ transplantation: Islamic perspective. Avicenna J Med. 2017 Apr-Jun;7(2):35-45.
29. Padela AI, Arozullah A, Moosa E. Brain death in Islamic ethico-legal deliberation: Challenges for applied Islamic bioethics. Bioethics 2013;27:132-9.