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Editorial

Dr Sharif Kaf Al-Ghazal, *Editor in Chief*

Assalamo Alaikom

It has been proven that patients undergoing long term dialysis with chronic renal failure have worse survival rates than those with kidney cancer. This is why the medical community considers transplants to be crucial in treating patients who are on dialysis whenever possible.

The issue of organ donation in general still remains an incredibly important one which attracts a lot of discussion amongst medics, ethicists, healthcare policymakers and wider society but it stimulates particularly lively debate within the Muslim community. We at JBIMA have welcomed these discussions and continue to facilitate them whilst encouraging more participation within what is currently a politically hot topic. Within this issue of the journal, you will find articles addressing this issue and its challenges.

Organ donation is an essential therapeutic tool in the treatment of irreversible organ damage. The very first transplant took place in 1954, when Ronald Herrick donated a kidney to his twin brother who was dying from renal failure. Ever since then, the process of organ donation has been refined, debated, and developed to the stage we see today. Three people die every day as a consequence of this shortage.

It is known that the number of people from the British Muslim community waiting for kidney transplants in the UK is far greater proportionately than their representation in the UK's population. This underlines a vital need for the Muslim community to engage with the issue as it is one that is directly relevant to us. The concept is viewed as controversial by some and there are those who disagree with it.

Scholars who argue against organ donation raise three main objections to the practice. Their first objection is that the human body has been honoured and made sacred by God, irrespective of whether it is dead or alive. It is unlawful to deform it in any way, regardless of how extreme the need may be. Cutting the human body to retrieve organs amounts to mutilation and deformation, and is therefore prohibited in Islamic sources. Their second objection is

that the human body is a trust from God and not something we can claim ownership of. It is therefore inappropriate for one to decide to donate their body parts.

Their third objection is that donating one's organs actually harms the donor, contradicting a key principle in Islamic law which states that it is unlawful for individuals to inflict harm upon themselves or others.

In contrast to this, scholars supporting organ donation cite four main reasons for doing so. Their first reason is that they state that an important maxim in Muslim legal theory states that 'necessity makes prohibitions lawful'. The necessity for organ donation is demonstrated by the number of lives it saves every year. Therefore, the prohibition on organ donation is lifted. They also state that when confronted by two evils, the lesser of the two takes preference. The prospect of death is clearly worse than the problems of organ donation, and thus is a sufficient reason to allow it. Another reason that some scholars support the concept is that they state that modern operating techniques to retrieve and transplant organs take care to respect the human body and do not violate its sanctity. Furthermore, organ transplantation has been closely regulated in the UK by the Human Tissue Authority to ensure good and ethical practice. Ultimately, they state that in certain situations, Muslims are permitted to utilise their God-given gifts to help others in lawful ways. Some jurists and scholars have gone even further and considered organ donation to be an ongoing charity (*Sadaqa Jariya*) as "protection of life" is considered one of the five purposes of Islam (*Maqased Al-Sharia*). Allah (swt) mentioned in the Holy Qur'an (5:32): "and who saved the life of one, it shall be as if he had saved the life of all mankind".

Since the 1970s, many Muslim organizations outside the UK (i.e. Islamic fiqh academy in Jeddah, Organisation of Islamic Conference, Organisation of Medical Sciences, Al-Azhar in Egypt and others in Malaysia, Iran and elsewhere) have all issued fatwas supporting organ donation. The European Council for Fatwa and Research (ECFR) has followed their lead and various Islamic Institutions in the UK were happy with the rulings although there has been a level of historical reservation and conservatism within scholars from the Indian sub-continent towards organ

donation for many reasons (some stated above). That being said, many scholars and Islamic organisations in the UK who originate from the Indian Subcontinent have been recently revisiting their opinions and fatwas and considering organ donation in a more positive light.

It is extremely important to get the Muslim community on board and improve their engagement with the issue. This can be done by facilitating discussions and hosting workshops and seminars on the issue to educate the community including our local imams. I'm proud that the British Islamic Medical Association (BIMA) has done this over the last few months and proved that public engagement with this topic will improve the informed process. On a few occasions, there was a positive shift of almost 60% of those who were sceptical before the seminar towards being in favour of organ donation after the seminar.

It is good to see more discussion within Muslim scholars in the UK taking place, and very recently a new opinion has been published by the Institute of Islamic Jurisprudence in Bradford which demonstrates a positive shift from the Ulamaa and Scholars to address this medical issue which has been a challenge for decades.

It is worth considering the challenges presumed consent will bring in the very near future as it will be law from April 2020 onwards. This new law states that one is presumed to be an organ donor unless stated otherwise and creates an opt-out system. This is a significant development and highlights how important it is for the British Muslim community to engage and properly understand organ donation with such rapid legal developments taking place. Some European countries including Spain, Belgium and France have their own opt-out systems for organ donation and this has recently become law in Wales in 2015. The system has been a success and has saved many lives. Despite the presumed consent in Wales, the opt-out system provides the deceased's next of kin the right to refuse organ donation if he/she argues that the deceased had stated so at some point. This has given the deceased's relatives the satisfaction that there is no ambiguity with regards to the decision, enabling them to fulfil the deceased's wishes and goes some way in allaying their concerns. More needs to be discussed on the concept of presumed consent in particular within the Muslim community to ensure all concerns are addressed.

Organ donation is just an example of what will face our Muslim scholars with the advancement of medicine and discussions happening in the field of medical ethics. It is ethically and morally problematic for our Muslim community to be lenient in receiving organs but in refusing to donate. There is a great need to show how our Fiqh has developed and how we desperately need our scholars to adopt the ijtiḥād to keep up with the fast changes and challenges in the field of medical ethics. The challenges of complex biomedical ethics are developing at a rapid

pace; our Muslim scholars must keep up to ensure that our fiqh is providing answers to these challenges. This issue highlights the need for a collective council approach which brings together medics and scholars.

Yours truly,

Editor in Chief

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Introduction to Islamic Medical Ethics

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Abstract

Islamic medical ethics is the methodology of analysing and resolving the ethical issues that arise in healthcare practice or research based, on the Islamic moral and legislative sources (primarily Quran and Sunna), and aims at achieving the goals of Islamic morality. Islamic ethics upholds “the four principles” of biomedical ethics. However, there are some differences in the applications of these principles. The aim of this paper is to briefly highlight the principles and characteristics of Islamic medical ethics.

Introduction

Since the second half of the 20th century, “Bioethics” has become a relatively new topic for Islamic scholars resulting in engaging discussions throughout the Islamic world. In short, bioethics is a study that examines the moral basis of human behavior in medical fields. (1)

Islamic medical ethics is an extension of Shari’ah (Islamic law), which is itself based on 2 foundations: The Qur’an (the holy book of all Muslims), and the Sunna (The Tradition of Prophet Muhammad including his sayings, acts and approvals). When no clear rule is found in the Quran or Sunna, “Ijtihad” or “Qiya’s” is contemplated. 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.)

National, as well as international Islamic organizations, have been conducting thorough examinations of

contemporary issues in medical ethics. There are several universal principles in the field of ethics that are considered to be essential guidelines. Many of these principles have even published Fatwas (decrees) and in-depth studies to help clarify the many issues that have emerged.

The objectives and aims of Islamic rules (Shari’a) are: preservation of faith, preservation of Life, preservation of mind (intellect, reason), preservation of progeny (al-nasl), preservation of honor (al-irdh) and preservation of property. Given the wide range of ethical commands in Islam, Islamic ethical tradition devotes a special attention to the medical practice to ensure that such practice adheres to the Islamic Shari’a (Law). (3)

All nations have common principles in morality and ethics. (2) The source of these moral and ethical attitudes, from Islamic point of view, can be traced back to three main sources: Intuitive Reasoning or al-fitra (innate nature), faculty of Reasoning or al-‘Aql and Divine Revelation or (Al-wahy, Tanzil). (1)

Pillars of Islamic Medical Ethics

The first pillar, Fitra, refers to the innate nature of a human being; encompassing the good and the bad qualities. Across different cultures, both past and present, humanity has common views on certain issues, which can be attributed to human nature. In every person, there is an innate intuition that can guide him/her to right or wrong in, at least, the basic morals. Without having to consult any religious beliefs or laws, it is a known fact that killing innocent human being is an abominable act.

The second pillar is “Aql” (Reason, Intellect): that is a guide used to think critically and distinguish right from wrong. 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. (1) In Islam, God tells people that Reason is what separates them from the behavior of animals, and is used to keep impulses at bay, should they arise.

The final pillar is “Wahy” (the revelations and guidance of God, carried by his prophets to the people). The ‘Oneness of God’ is the doctrine that states that there is one God, a singular divine being. In Islamic belief, revelation or inspiration is God’s Word delivered by his chosen individuals known as Messenger prophets. It is traditionally thought that God sends these prophets to people who carry revelations that are used to direct their lives. Historically, the first prophet was Adam, and the last one was Muhammad Peace Be Upon Him (PBUH). To truly understand Islamic traditions, one must realize that this is a means of guidance toward the true origin of humanity and the final return to God. All schools in the Sunni (majority sect of Muslims) Shari’ah (Islamic law) are dedicated to the study of how “Wahy” guides the first two pillars and protects everyone from corruption. Wahy also focuses on the possibility of how to restore the masses to the way they existed before, in their prime unaltered form. (1)

Islamic medical ethics also upholds “the four principles” of biomedical ethics proposed by Beauchamp and Childress. According to this approach, the four general principles of biomedical ethics are: (1) Respect for autonomy, (2) Beneficence, (3) Non-maleficence, and (4) Justice. There is different emphasis, however, on the individual principles compared with the classical understanding of them in the Western Bioethics.(4, 5)

The need for Medical Ethics

Medical ethics is becoming an important part of the medical curriculum today. The clinical years of medical student education are an ideal time for students to learn, practice and develop ethical thinking and behavior. (6) Doctors’ ethical issues are usually seen in their communication with patients and about limited healthcare resources attempting to use in the most cost-effective way. Ethical issues arise far more frequently than most young doctors would have anticipated when they were medical students. During an average day of a doctor, there may be no ethical dilemmas at all about genetic testing, cloning, or end-of-life care. However, they are exposed to seeing patients misinformed about the purpose of the procedure, breaking bad news at times to their patients, maintain confidentiality or keeping proper relationship with their colleagues and other health care providers.(7)

Preservation of life

The first main principle of Islamic Medicine is the emphasis on the sanctity of human life which derives from the Qur’an: “whoever slays a soul, unless it is for manslaughter or for mischief in the land, it is as though he slew all men; and whoever keeps it alive, it is as though he kept alive all men “ (Qu’ran: 5: 32). According to this verse, saving life is an obligation and the unwarranted taking of life is a major crime.

The doctrine teaches that no one has the right to kill an innocent soul. The belief that killing an innocent person is equal to killing the whole of humanity is deeply rooted in the religion. Islam oversees immense wealth used to compensate the victims of unintentional murder, also given the name Diyha (money payable in respect of unintentional homicide). Years ago, the Diyha was worth 100 camels of different ages and specifications. In more modern times, the value of the 100 camels is determined by the Shari’ah Court. Medical treatment involving the usage of pork, blood, or alcohol is also prohibited. However, if there are no alternative means to preserve the life of human being, the usage of those substances will be allowed under the supervision of a trusted Muslim physician.

Seeking remedy

The second main principle is the emphasis on seeking a cure. This derives from a saying of Prophet Muhammad (PBUH): There is no disease that God has created, except that He also has created its treatment.(8) The Prophet (PBUH), in another narration, is also reported to have said: “Seek treatment, for God the Exalted did not create a disease for which He did not create a treatment, except senility”.(9)

It is interesting to note here, that the Hadith is meant to

give hope to patients and one should take any proper road to his/her recovery and do whatever can be done to move in a positive direction. One should keep fighting and not become unnoticed and cast aside. The Prophet Muhammad (PBUH) actually sought out clinicians to treat patients according to their best knowledge. He also advised his followers to do the same to maintain their good health, which was seen as a gift from God. The prophet himself sought remedy and described medicaments of his time to his family and followers.

During recent years, the preservation of health has become a critical issue and some measures have been implemented in its promotion. Curative medicine is far more expensive than health preservation which cuts the amount of money given to medical companies.(10) In other not-such-controversial matters, it is agreed that one should always stay healthy, and seek out remedies should he gets ill, although disease is considered to be a natural phenomenon that expiates sins.

Seeking remedy in Islamic jurisprudence may be obligatory (mandatory) in certain lifesaving situations or may be preferred or encouraged (mandoob) in other situations. It may be facultative or optional and may be (makrooh), that is, discouraged, and in some situations or a certain type of treatment it may be (haram), that is, not allowed. Seeking remedy is facultative (optional) or (mobah) where the benefit is not proved or even doubtful and where ill effects of that mode of therapy are uncertain. It may be (makrooh) when therapy is unlikely to bring benefit and where harm or even inconvenience from the therapy may exceed its benefit. (11)

In Christianity, apart from the few that deviate, it was preferable not to treat illnesses. Instead, it was customary to depend on one's faith in God's omnipotence, which, in fact, directly contradicted the actions of Jesus who always helped the sick, injured, and the demented.

Rules of Medical Practice

Motive, an integral part of concept of morality, defines the inner impetuses of a person showing his/her true intentions to God. If they had good intentions, but in the end caused more harm than good; it would probably go unpunished. The Prophet (PBUH) said: "Actions are to be judged only by intention."(12) The good intentions were the redeeming factor. Thus, the character of a person becomes particularly crucial in the entire sphere of the healthcare system. In the world of medicine, where, at times, logic can be flawed and unfair, specific rules and guidelines must be firmly established. For example, what actions are considered wrong and what deserves punishment or compensation must be determined in advance. To be trusted, the system must have some legitimacy to it. The legal boundaries will often clarify the most complicated situations since

they are based on common sense and rational behavior. However, there will always be those gray areas that are set by cultures and religions. In Islam, the guidelines, legal or not, come from the Qur'an and Sunnah. These rules have specific criteria which carefully explain how to handle almost any situation. (5) The Prophet Muhammad (PBUH) said: "Whoever practices medicine when he is not known for that, he is liable". (13) In the Islamic history, no one had the right to practice medicine without a certificate or approval provided by the Muhtasib (the controller of physicians). The physician who is lacking sufficient knowledge in his/her field will be fully responsible for his acts, and often punished for his mistakes. If the physician, however, follows all the rules and procedures but harm occurred to the patient, the physician is not liable.

Abdulmalik ibn Habib (al-Andalusi) (d:238H/853G) wrote one of the first books on Al-Tibb Al-Nabawy (Prophet Medicine) that discussed the ethics of medicine. He stated that physicians should not only be liable if they make a mistake, but must be liable if they practice medicine at all without the sufficient teaching and training. (14)

Medical practitioners must be sufficiently qualified to inform the patients of their conditions and options. It is the job of the physician to have empathy for their patients and to care for their recovery and mental well-being. This is true even if the methods of help are futile; the medical team is responsible to help their patients to come to terms with the onset of death and make peace with that expected outcome. (15)

Medical Ethics Principles

If a medical practice is to be considered "ethical," it must include all these principles: autonomy, justice, beneficence, and non-maleficence. These premises are deeply rooted in the Islamic verses. (4,5)

Autonomy: The oath of Hippocrates' is used to guide a physician to do only what is in the best interest of the patient. It is stated that the medical professional should be treated as if he/she was a family member; only acting on what needs to be done; not what the patient wants to be done. This philosophy was rejected by an increasingly liberal system in the West during the 1970's. They opted to give the patient the liberty to choose his course of action. Autonomy literally means self-rule. The Qur'an clearly declared that "there is no compulsion in religion". (Quran 2:256) and that each person has the full will to accept Islam or refuse it. Van Bommel also says: "For a Muslim patient, absolute autonomy is very rare, there will be a feeling of responsibility towards God, and he or she lives in social coherence, in which influences of the relatives play their roles".(16) Consequently, personal choices are only accepted if they are the "right" ones.(4)

The patient has the right to be well informed to make decisions about his/her treatment. The informed consent should be obtained with free will without coercion. In modern Islamic bioethics, the family plays an essential role in the decision-making process as does the patient. It is similar to the methods used in other eastern cultures like India and Japan, much to the opposition of more liberal communities who value autonomy above all else. This is especially true in the case of major operations that may cause death. The decisions about resuscitation, organ transplantation, or abortion are clear examples where the family of the patient deserves to be included in the decisions. (15) This is especially true in the Islamic culture. If the patient is deemed to have a mental deficiency or when a guardian refuses the treatment; it is the responsibility of a magistrate of the government to make medical decisions. Except in cases when there is a life or death situation, the consent of the person being treated or his/her guardian, if the patient is incompetent, must be obtained. (17)

Non-maleficence: Non-maleficence is an essential part of morality and bioethics. If an action results in both good and harm, it is preferable to prevent causing harm. Furthermore, if a good outcome outweighs the harm in a situation, the action can be completed and accepted. The Prophet Muhammad said, “La Dharar wa la Dhirar” (There should be neither harming nor reciprocating harm). (18) In his book, “Qawa’id Al Ahkam” “Basics of Rulings,” Al Izz ibn Abdul Salam (d:660H/1262G), an Islamic jurist, stated that the aim of medicine is to preserve health and to provide a cure when it is needed. At times, in order to reach this goal, the lesser harm must be accepted to avoid greater damage. The eventual goal is for the patient to benefit from the treatment. (19) As a result, prohibited treatments can be permitted when they are deemed necessary and when there is no alternative. This rule applies to taking medicine containing porcine material or alcohol. If there is no alternative, the safer treatment is the best choice.

There are five major maxims of particular significance to medical practice and to the field of Islamic medical ethics. (20) One of them is Al-Mashaqqatu Tajlibu Al Taiseer (Hardship begets facility). Several legal principles were derived from this maxim, especially those, which relate to the concepts of darurah (necessity) and hajah (need). Among them is the rule “Al-daruratu tubihu al-mahzurat (necessity makes the unlawful lawful). However, committing the otherwise prohibited action should not extend beyond the limits needed to preserve the purpose. For example, the use of morphine or similar drugs is allowed in the cases of chronic pain if no alternatives prove to be effective. (20)

Beneficence: Beneficence is so intimate to the principle of non-maleficence. The term beneficence implies acts of mercy, kindness, charity, altruism, love, and humanity. There are many verses in the Qur’an that orders Muslims to

“enjoin the right and forbid the wrong” when considering that the true nature of man (al-fitra) is to be good.

Justice: Justice is often regarded as being synonymous with fairness. A great importance is paid to justice by the Holy Qur’an. The main purpose of sending the prophets was to establish justice in the world. The Qur’an says: “Indeed We have sent Our Messengers with clear proofs, and revealed with them the Scripture and the Balance (justice) that mankind may keep up justice.” (Quran 57:25). Justice is not only a supreme virtue but also a command from God. Qur’an says very openly that “God commands justice (principle of Justice), doing of good (principle of beneficence), and giving to kith and kin, and forbids all indecent deeds, and evil (principle of non-maleficence) and rebellion: He instructs you that may receive admonition” (Quran 16:90).

The physician must help everyone without consideration of faith, skin color, or social status.

Islamic Medical-Ethical Code

The Islamic medical-ethical code that is used today is primarily based on Galen’s work and the Hippocrates oath (16). Necessary changes were made to fit with the ethos of Islam today and coincide with the Qur’an and Sunnah. The original Greek code had many facets that coincided with Islamic sources, especially in the case of juridical matters. It often mirrored what is seen in the Qur’an and Sunnah today, such as the accountability of physicians regardless of their expertise or status. The code also includes a religious statement that one must always be conscious of his/her duty to God and His Prophet. A physician, it states, should follow the rules of Islam in private and in public: “O Allah, grant me the strength, patience, and dedication to adhere to this Oath at all times”. This whole process started during the time of Abbasid Caliphate (Al-Muktader) when the high physician took the Hippocrates oath. After altering it to fit his religion, he was able to keep the same premise of its original meaning (1, 16).

Conclusion

Because of the interconnections between Islamic law and Islamic ethics, Islamic medical ethics has to consider requirements of the Islamic law (Shari’ah) in addition to moral considerations. Islamic medical ethics empower and support Muslim physicians when they encounter health care dilemmas. When facing a medical problem, a physician has to decide for his /her patient in light of available knowledge, experience of his/her peers and consensus of the medical community. In addition, a Muslim physician derives his /her conclusion from rules of Islamic laws (Shari’ah) and Islamic medical ethics.

References

1. Al-Bar MA, Chamsi-Pasha H. Contemporary Bioethics: Islamic perspective. New York: Springer Publishing; 2015.
2. Beauchamp T, Childress JF. Principles of biomedical ethics. 7th edition. New York: Oxford University Press; 2013.
3. Shabana A. Religious and cultural legitimacy of bioethics: lessons from Islamic bioethics. *Med Health Care Philos* 2013; 16: 671-7
4. Mustafa Y. Islam and the four principles of medical ethics. *J Med Ethics*. 2014 Jul;40(7):479-83.
5. Chamsi-Pasha H, Albar MA. Western and Islamic bioethics: How close is the gap? *Avicenna J Med*. 2013 Jan; 3(1): 8-14
6. Chamsi-Pasha H, Albar MA. Islamic medical jurisprudence syllabus: A Review in Saudi Arabia. *Med J Malaysia*. 2017 Oct;72(5):278-281
7. Chamsi-Pasha H, Chamsi-Pasha M, Albar MA. Pragmatic message to junior doctors. *Postgrad Med J* 2016; 92(1089): 418-20.
8. Sahih al-Bukhari, Book 79, Kitaab al-Tibb, Chapter 1, Hadith 5354.
9. Sunan Abi Dawuud. Vol. 2, Book 27, Kitaab al-Tibb, Chapter 1, Hadith 3855
10. Miller G, Daly M, Roehrig C. Tradeoffs in cardiovascular disease prevention, treatment, and research. *Health Care Manag Sci*. 2013 Jun; 16(2): 87–100
11. Chamsi-Pasha H, Albar MA. Ethical Dilemmas at the End of Life: Islamic Perspective. *J Relig Health* 2017 56(2): 400-10
12. Sahih al-Bukhari. Book of Revelation. Hadith 1, vol. 1.
13. Sunan an-Nasa'i, Book 45, Hadith 125.
14. Al-Bar MA. Comments on: Abdulmalik ibn Habib. *Allbeiri Tibbi Nabawi*. Damascus: Dar alQalam; 2017 (3rd edition).
15. Chamsi-Pasha H, Al-Bar MA. Doctor-patient relationship. Islamic perspective. *Saudi Medical J* 2016. 37(2): 121-26.
16. Van Bommel A. Medical ethics from the Muslim perspective. *Acta Neurochirurgica Supplement*. 1999; 74: 17–27.
17. The International Islamic Jurisprudence Council, OIA. 1992-2009. Fatwas and Decisions: Fatwa No. 7/5/67 on Consent of the Patient. The 7th session, 1992. Fatwa No. 171/10/18. The 18th Session, 2007. Fatwa on Consent in urgently needed operative intervention. Decision No. 184/10/19. The 19th Session. Jeddah: Book of Decisions; 2009.
18. Sunan Ibn Majah Vol. 3, Book 13, Hadith 2341.
19. Al Izz ibn Abdul Salam. *Qawa'id Al Ahkam*. [commented by Nazih Hammad and Othman Dhamariyah] Damascus: Dar al Qalam; 2012 (2 volumes).
20. Chamsi-Pasha H, Al-Bar MA. Principles of Islamic Medical Ethics. *JBIMA*. 2019 April, Vol. 1 - No. 1.(www.jbima.com)alternative.Islamic Perspective. New York (NY): Springer; 2015.

Organ Donation: 'Redressing the Reality'

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Keywords: *Organ Donation, Islam, Medical Ethics, presumed consent, deemed consent, fatwa*

Introduction

Organ transplantation is an issue which is conspicuous by its absence in Muslim scripture. The reason for this is quite simple – the first successful organ transplant took place in 1954 in America whereas the Qur'an was revealed in seventh-century Arabia. Therefore, classical Islamic law manuals - be they Sunni, Shia, Hanafi, Maliki or any other schools of law and theology – are understandably silent on the issue. A lack of direct guidance from the Qur'an and sunna and classical Islamic law books has led Muslim scholars, individually as well as collectively, to debate the issue. The first discussion on the topic took place in 1925 by Shaykh Abdur Rahman al-Sa'di, a Saudi scholar (1).

As a resident of Cardiff, a khatib in the local mosque and a lecturer of Islamic Studies at Cardiff University, I became interested in the topic after the law of deemed consent was introduced in Wales in December 2015. Since then I have been researching fatwas from the Muslim world on the issue in Arabic, Urdu and English. My investigation has led me to extrapolate six main Islamic positions on organ transplantation. These range from organ reception and donation being declared absolutely halal (2) to both being pronounced impermissible (3) - and various positions in between. The recent 110-page fatwa by Mufti Mohammed Zubair Butt is only one opinion from amongst the six (4). There is a seventh opinion where the mufti suspended judgment (tawadduq) until further research is carried out. The fatwas differ from each other due to differences of understanding between muftis regarding Islamic conceptions of human dignity, bodily integrity, individual autonomy, death and dying and many other things. In my research, I argue that since the topic is not discussed in the Qur'an, sunna and classical Islamic law books, all of the fatwas are based on ijtihad (independent reasoning) and therefore no one position can lay claim to the truth over the other. In this instance, people are required to understand the different Islamic positions with the assistance of their imams, local ulama and chaplains in order to make a religiously informed decision. This can only be possible if the information provided is accurate and factual.

Misinformation can ultimately result in the difference between a life and death decision. In the remainder of this article, I take the opportunity to redress some common misconceptions about organ donation in Islam and the new law of 'deemed consent'.

Understanding the New Law on 'Deemed Consent'

The 'Organ Donation (Deemed Consent) Act 2019' - popularly known as Max's and Keira's Law - expects to reverse the current position on organ donation in England from one where people have to sign up to donate their organs to the default position being 'deemed consent' in the absence of opting-out. This may give the impression that once the Act becomes law in spring 2020, one is no longer in control over their body if they do not opt-out.

This is certainly not the case in Wales and won't be in England. First of all, the law will only apply to people who have been resident in England for more than a year, who are over the age of 18 and who do not suffer from any form of disability. The 'deemed consent' law in Wales and England can be characterised as 'soft opt-out' as opposed to a 'hard opt-out'. In a 'soft opt-out' law, wishes of family members will always be respected and they do have a say in how and where the organs of their loved ones could be used (5). This then raises the question as to what is the purpose of this new law? The new law has two functions: (1) to catch all those people falling through the net who agree with organ donation but have not signed up on the organ donor register. Under current legislation, such people's organs cannot be retrieved without explicit consent. (2) It makes it easier for hospital staff to raise the topic of organ donation with the family of a dying patient. Furthermore, not everyone who has consented in the current system or will not opt-out in the new system will go on to become donors. Out of the 500,000 people who die in the UK every year, only 1 in 100 die in circumstances where they are able to donate their organs.

There are more chances of a person requiring an organ than being able to donate one. For a person's organs to be eligible for retrieval for donation, a person has to either die in hospital in an intensive care unit or an accident emergency department. Even then, it will depend on the status of the donor, for example the pancreas of a person with diabetes will not be retrieved even though he has consented or not opted-out. More so, if a recipient is not found on the day the donor dies, or a recipient is found but there is no tissue match between the donor and the recipient, no solid organs will be retrieved from the donor even if all his organs are healthy.

The technology to preserve an organ in an organ bank for later use in transplant surgery does not exist because organs only have a short shelf-life - known as cold ischemia time. The heart and lungs have a cold ischemia time of 4 to 6 hours; the pancreas, 12 to 24 hours; the liver, up to 24 hours; the kidneys, from 48 to 72 hours. The cornea tissues must be transplanted within 5 to 7 days and heart valves, skin, bones and saphenous veins have a shelf-life of 3 to 10 years. It should be noted that the NHS only retrieves organs for transplantation into needy patients. It does not fall within the NHS' remit to retrieve organs for research purposes. Donating organs or the entire body for research purposes requires express consent and falls outside the remit of the NHS as well as the fatwas on organ donation.

Another common confusion is that in an opt-out system if a person does not opt-out, doctors are able to retrieve any organs from the deemed consent list. This is factually incorrect. A person and his family can specify exactly which organs or tissues they want to donate or opt-out from. This is clearly an option given when one fills in the organ donation register either to express consent or opt-out. They can also specify whether organ retrieval should happen after circulatory determination of death or after neurological determination of death.

Which Organs are Excluded from the New Law?

There are certain organs which are excluded from the new law. This means that if someone intends to donate these organs they must give express consent. The government has no intention of moving these to the 'deemed consent list'. They include: penis, uterus, brain, face, spinal cord, testicles, arm, leg etc. These are known as 'rare or novel transplants'.

There is a misunderstanding that there is a current government consultation open to move some or all of these organs to the 'deemed consent list'. This is incorrect. The government consultation relates to whether some of the organs which form part of the 'deemed consent list' should be moved to the 'rare or novel transplant list' which require express consent. These organs include: eye, nervous tissue, artery/vein, bone, muscle, tendon and skin (6).

Deemed Consent and Islam

From an Islamic point of view, whether deemed consent is permissible or not will depend on one's position as to whether organ donation is permissible or not. The fatwa of the European Council for Fatwa and Research (2000) (7) and the recent 110-page fatwa (2019) argue that if deemed consent was to exist in society and became widely accepted, it would take the ruling of implied consent.

Post-Mortem examination

Muslims have been campaigning for a long time for non-invasive post-mortem examination techniques. They have succeeded in doing this by introducing MRI scans in some hospitals. Foremost in this effort were NHS Muslim chaplains, including the author of the 2019 110-page fatwa. Does organ donation advocate against this principle? No, for there are a number of problems associated with invasive post-mortem examination which are not found in organ donation.

1. There is no dispute amongst the ulama that in the presence of a suitable alternative, use of human organs for transplantation is not permissible. Should this become possible in the future, all the fatwas will change to impermissibility inshallah. However, with the exception of certain valves and tissues, an alternative solution to solid organs is currently not available. In the case of post-mortem examination non-invasive MRI scan has been made available.
2. The object of post-mortem examination is to find the cause of death; therefore, it is the duty of the pathologist to cut open and examine every organ should they need to. There is no requirement to keep the organs or any other body parts intact. In contrast, the sole motive in the case of organ retrieval is to procure the organs fully intact. This takes more subtlety and surgical precision. Post-mortem examination is done by a pathologist whereas organ retrieval is done by a specialist surgeon.
3. For legal reasons, post-mortem examination happens when the deceased dies outside of a hospital or if there is medical malpractice suspected. The examination can take a long time to carry out. This will definitely prolong the burial. In contrast, the delay in burial in the case of retrieving an organ is relatively shorter. It takes a maximum of 60 minutes 'knife to skin' to retrieve organ. This has been confirmed by Dr Muhammed Tariq Dosani, Consultant Urologist and Transplant surgeon, Freeman hospital, Newcastle. The retrieval team already are in place and once the organs are retrieved and the body surgically stitched up, the body is released to the family. There may be a 16-20-hour delay in releasing the body which is minimal compared to post-mortem examination or sending the deceased abroad to be buried. Muslim transplant surgeon, Dr Majid Mukaddam says, there are efforts in place to minimise this time.

Ghusl

People's experience of washing a body which has been subjected to post-mortem examination has been one of horror and shock. As sad as this may be, there is a stark difference between how post-mortem examination is done and how organ retrieval surgery is done., Dr Majid Mukadam responds to this by saying that one should not confuse organ retrieval with post-mortem examination. He confirms that after an organ retrieval surgery the body of the deceased is treated with utmost respect and returned to the family in a dignified manner.

Dignity and exposure of the body

Whilst it is paramount to maintain dignity by not exposing body parts, the ulama have allowed for body parts to be exposed to the opposite gender due to necessity. Dr Mukadam says that whilst the ideal situation will be to match the gender of the surgeon with the gender of the patient, this is not always possible due to the lack of female transplant surgeons He mentions that there are more male gynaecologists than female ones.

Allah has dignified the human being, and part of this dignity lies in helping one another. Allah says, 'whoever saves a life it is as if they have saved the entire mankind' (Qur'an – 5:32). Given that the issue of organ donation is not directly addressed in Muslim scripture, some Muftis have extrapolated its permissibility from verses such as these.

I believe the issue of organ donation from an Islamic point of view is one of choice. Individual Muslims should consult reputable Islamic scholars to reach a position they are comfortable with. However, I leave readers with the words of brother Amjid Ali whose life was saved after receiving an organ donation from a family member:

"I will leave you with one final question, which I urge you to consider. If you or a member of your family needed an organ transplant, would you take one? If so, shouldn't you be prepared to help others?"

References

1. Sa'di, AbdurRahman, Hukm Naql al-A'da. In: Majmu' al-Fawa'id wa Iqtinas al-Awabid in Majmu' Mu'allafat al-Shaykh AbdurRahman b Nasir al-Sa'di. Vol. 21. Qatar: Wazarat al-Awqaf wa al-Shu'un al-Islamiyya 2011 (1925). p. 95-100.
2. IFA. Declaration of the Islamic Fiqh Academy in its 8th Session (1985). Majallat al-Majma'at al-Fiqhi al-Islami. 1985, 2003 reprint;1(1):77-80.
3. Shafi M. A'da' Insani ki Pewandkari (1967). In: Jawahir al-Fiqh. Vol. 7. Karachi Maktaba Darul Uloom

Karachi 2010.

4. Butt MZ. Organ Donation and Transplantation in Islam: an opinion 2019. Available from: <https://nhsbtbdbe.blob.core.windows.net/umbraco-assets-corp/16300/organ-donation-fatwa.pdf>
5. NHSBT. Organ donation law in England is changing: The basic facts: NHSBT; 2019 [Available from: <https://www.organdonation.nhs.uk/uk-laws/organ-donation-law-in-england/>
6. Department of health and Social Care. Organs and tissues to be excluded from the new system of organ and tissue donation in England (known as "opt-out" or "deemed consent"). Online, Department of health and Social Care; 2019. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/798467/Organs_and_tissues_to_be_excluded_from_the_new_system_of_organ_and_tissue_donation_in_England_-_consultation_document.pdf
7. ECFR. Organ Donation: Resolution of the sixth session 2000 [Available from: <https://www.e-cfr.org/%D9%86%D9%82%D9%84-%D8%A7%D9%84%D8%A3%D8%B9%D8%B6%D8%A7%D8%A1/>

Re-examination of the Fatawa on Organ Donation in Light of Current Medical Research

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Keywords: *Organ Donation, Fatwa, Islam, Medical ethics*

Introduction

Muslims in the UK face discord due to the clash of opinions on the 'opt-out' system to be introduced in April 2020. In this article, I share my opinion on how a careful re-examination of the fatawa that contribute to the prohibition of organ donation may provide a fresh perspective on how to advise on the new opt-out system.

Re-examination of the Fatawa on Organ Donation

The fatawa on organ donation have been re-examined over the decades as muftis became more informed of medical research. The earliest known discussion on organ donation was by the Saudi Quranic exegete Sa'di in 1925 [1]. The discussion encourages organ donation as a viable option for Muslims who seek an organ transplant. This discussion occurred two decades after the first corneal transplant was performed in 1906. The permissibility of blood transfusion and corneal transplants were officially given a permissibility status by the grand mufti of Egypt Sheikh Mamoon in 1959 [2]. Perhaps, the period of time that elapsed before the fatwa was released may surprise some, however, a number of developments occurred between Sa'di's discussion and Mamoon's fatwa on permissibility. These developments included the approval of Safar's ABC technique for resuscitation which became the basis for mass training of CPR. The first successful kidney transplant was performed between fraternal twins in 1959 [3]. These developments would have influenced the process of issuing the fatwa on the permissibility of organ donation, especially since the aforementioned developments contributed to the success of life-saving transplants.

A fatwa that precedes scientific discoveries requires re-examination. Further discussions on organ transplantation saw a number of different arguments from a theological perspective on the question of who owns the body and whether humans have any right to donate organs in life

or upon dying. While such theological or philosophical questions are not answerable by medical research, such questions have warranted much attention over the past few decades, questions to which science may provide insights. Medical science can help determine the point when an individual could be considered dead; or whether organ donation is the best treatment on a practical level, rather than the process being experimental. Neurological criteria for death, which revolutionised how end of life was determined, was adopted by the Harvard Ad Hoc committee in 1968 [4]. This year is significant as only a year earlier, the late grand mufti of Pakistan Muhammad Shafi issued a fatwa on the prohibition of organ donation [5]. The same year saw the first successful heart transplant in South Africa [6] followed by another in the United States [7]. The first successful liver transplant also occurred in the same year. Whether Shafi was aware of these successful transplants remains unknown. Nevertheless, these medical breakthroughs have led contemporary jurists to the re-examination of the arguments made by Shafi, whose fatwa could no longer be viewed as timeless.

Furthermore, re-examination of fatawa should be researched-based and in light of the latest medical developments. In the UK, organ donation has resulted in a difference of opinion involving the majority of Islamic jurists of south Asian affiliation being inclined to the mentioned fatwa by Shafi. On the other hand, other jurists of the same affiliation have considered the medical research which followed Shafi's fatwa. The numerous international conferences that have taken place in the past few decades in Egypt (1979) [8], Kuwait (1979) [9], Saudi Arabia (1985) [10], and in Europe (1995) [11] all agreed on the permissibility of organ transplantation for life-saving purposes as well as for increasing the quality of life, from both living and deceased donors.

Consequently, jurists in the Indian sub-continent were also divided over the issue in light of this new research. Qadhi Mujahidul Islam Qasmi [12] and Khalid Saifullah

Rehmani [13] now argue in favour of organ donation. Mufti Taqi Uthmani [14] and Mufti Radaul Haq [15] who although have reservations on absolute permissibility now acknowledge the view of permissibility of the abovementioned jurists may be accepted in times of necessity and candidly provided their congregation with the option to follow the ruling of ant reputable jurist.

The UK has seen further developments since the 90s. These advancements include the Human Tissue Authority establish a robust system to monitor organ storage and transportation. This particular regulation also answers some of the concerns raised by Shafi who dedicated a large section of his fatwa to organ trafficking and exploitation; an issue, which by contrast, is heavily monitored in the UK. The chair of the Muslim Council of Britain, Badawi issued a fatwa in 1995 for the British context advocating the permissibility of organ donation, a fatwa that was mentioned in the Journal of Medical Ethics [16]. In 2004, Mufti Kawthari [17], a British jurist of Deobandi affiliation continues to acknowledge the view of permissibility. However, since the Human transplantation Act Wales (2015), a number of Muslim scholars across the UK have not only explicitly stated the permissibility of organ donation but consider the act to be worthy of divine recognition. Since 2016, scholars including Musharraf Husain [18] and Faraz Adam [19] voiced their views one Islamic websites. Mansur Ali [20], has argued for a theological pluralist view of any position being correct due to the ijtihadi nature of the debate, one that requires independent reasoning. The author of ‘Organ Donation and Transplantation in Islam - An opinion’ Mufti Zubair Butt [21] has demonstrated how a fatwa can be re-examined in light of the changes to highlight that the situation of Muslims in the UK would arguably improve the situation rather than have drawbacks.

To summarise, the fatawa on organ donation evolved over time as new medical developments occurred and new systems were put in place. Additionally, such developments lead to the re-examination of the fatawa that were previously issued. The recent fatwa by Butt, in my opinion, is a refreshing reminder of how jurists continue to re-examine and critically analyse previously accepted fatawa in light of the wider discourse on organ donation and serves as a reminder that transparency between Islamic legal experts and leading medical experts must continue for the welfare of the Muslim ummah.

References

- [1] Al-Sa'di AR. Majmua mu'allafaat, al-fawa'id wa Iqtinas al-Awabid. Doha: Al-Awqaf al-Qatariyya; 1925;25:95-100.
- [2] Dar al-Ifta al-Misriya, Al-Fatwa Al-Islamiyah, Cairo: The Supreme Islamic Council, Ministry of Endowment, Fatwa of Sheikh Hassan Maamoon (1959), 1982;7:2495.

- [3] Merrill JP, Murray JE, Harrison JH, Friedman EA, Dammin GJ. Successful Homotransplantation of the Kidney between Non-identical Twins. NEJM. [Online] 1960;262(25): 1251-1260.
- [4] Wijdicks E. The neurologist and Harvard criteria for brain death. Neurology [Online] 2003;61(7): 970-976 [cited 2019 July 17]. Available from: <https://n.neurology.org/content/61/7/970/tab-article-info>
- [5] Shafi M. Aza Insani ki Paywandkari, in Jawahir al-Fiqh, 7:56-59. Karachi: Maktaba Darul Ulum Karachi; 2010.
- [6] Barnard CN. Human cardiac transplant: An interim report of a successful operation performed at Groote Schuur Hospital, Cape Town. S African Medi J. 1967;41(48):1271-4. [cited 2019 July 1].
- [7] Silbergleit A. Norman E. Shumway and the Early Heart Transplants. Tex Heart Inst J. [online] 2006;33(2): 274-275. [cited 2019 July 17].
- [8] Mamun H. al-Fatawa al-Islamiyya. Dar al-Ifta al-Misriya. 1959: 7:2552.
- [9] Seminar on new issues in organ transplantation (Kuwait: October 1989). Jeddah: Fiqh Academy and Islamic Organization of Medical Sciences (unpublished).
- [10] Islamic Fiqh Academy of Jeddah. Resolutions and recommendations of the council of the Islamic Fiqh Academy 1985-2000. [online] [cited 2019 July 17]. Available from: <http://www.scribd.com/doc/19237054/Resolutions-of-the-Council-of-the-Islamic-Fiqh-Academy>.
- [11] ECFR Fatwa. Final Statement of the Sixth Ordinary Session of the European Council for Fatwa and Research (Islamic Center Dublin: August 28, 2000). [cited 2019 July 17]. Available from: <https://www.e-cfr.org/sixth-ordinary-session-european-council-fatwa-research>
- [12] Mujahidul Islam, Q. Contemporary Medical Issues in Islamic Jurisprudence. 2017. Kuala Lumpur: A.S. Noordeen.
- [13] Rahmani KS. Jadeed Fiqhi Masail. 2010. Karachi: Zamzam Publications
- [14] Al-Kawthari M. Is organ donation permissible? daruliftaa.com. [cited 2019 July 17]. Available from: http://www.daruliftaa.com/question?txt_questionid=q-18480963
- [15] Radhaul Haq. Fatawa Darul Uloom Zakariyya. 2013;6:728-755. Delhi, India: Zamzam Publishers
- [16] Ranan CJ. UK's Muslim Law Council. 1996. UK's Muslim Law Council approves organ transplants. The Journal of Medical Ethics. [online] 22(2): 99.
- [17] Al-Kawthari M. Is organ donation permissible? daruliftaa.com. [cited 2019 July 17]. Available from: http://www.daruliftaa.com/question?txt_questionid=q-18480963
- [18] Hussain M. Organ donation is a gesture of generosity; Why Muslims should be donors. musharrafhussain.com. 2016.[cited

2019 July 17]. Available from: <https://www.musharrafhussain.com/organ-donation-is-a-gesture-of-generosity>

[19] Adam F. iwillsolicitors.com. Organ Donation an Islamic Perspective. 2018 [cited 2019 July 17]. Available from://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/16300/organ-donation-fatwa.pdf

[20] Ali MM. Mahdi institute. Shifting discourse in the Muslim organ donation debate: reports of finding. 2017. [cited 2019 July 17]. Available from: <https://sites.cardiff.ac.uk/islamukcentre/2017/08/22/dr-mansur-ali-shifting-discourse-in-the-muslim-organ-donation-debate-reports-of-finding>

[21] Butt MZ. Organ Donation and Transplantation in Islam - An opinion. [cited 2019 July 17]. Available from://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/16300/organ-donation-fatwa.pdf

Classical muslim scholarly interpretations of when pregnancy begins?

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Keywords: *Abortion, Islam, Embryology, Fertilization, Implantation, Family Planning*

Abstract

Muslim scholars apply fiqh (substantive law) from classical text to modern understandings of embryology, yet sometimes we may fail to grasp that the theories of early human development then, may have been quite different to what we know today. There can be a serious charge of misapplication of fiqh when these theories do not correspond. I will demonstrate this using the case of how we define pregnancy. Pregnancy is the state “from conception to birth”, but there are problems with this definition as “conception” can mean either fertilization or implantation. This definition is important as it is a determining factor to when we can say a particular intervention is abortifacient or not. I will examine classical Islamic texts to identify whether there was any equivalent theoretical conception of the zygote (the fertilized egg), whether it had any independent moral status, and how fertilization and implantation were understood by classical Muslim scholars compared to what we know today. This will allow us to avoid any misapplication of fiqh pertaining to issues related to this topic.

Introduction

There is no single definition of Pregnancy. The American Heritage Stedman’s Medical Dictionary defines “pregnancy” as “from conception until birth.” (1) This can be confusing as “conception” can mean either fertilization (2) or implantation (3) and to others may mean both. (4) The discovery by O. Hertwig (1875-1878), of the very nature of fertilization- i.e. the fusion of the egg’s and spermatozoon’s nuclei, and Schleiden and Schwann’s discovery in 1839, recognising that the embryo develops from the single-celled zygote, led to a change of views on the ethics of the beginning of life.(5-6) In 1859 the American Medical Association published a statement strongly opposing abortion, commenting on the independence of the zygote during the time between its formation and its implantation. This was based upon the idea that the single-celled zygote was alive and an independent being.(7)

The American College of Obstetrics and Gynaecology in 1965 attempted to redefine “conception” to mean implantation rather than fertilization, (8) however, medical dictionaries and even English language dictionaries both before and after 1966 (9) defined “conception” as synonymous with fertilization. (10-12) Life was seen

to begin at the moment when the genetic information contained in the sperm and ovum (female egg) combine to form a genetically unique cell. As Eberl indicated, “What is controversial is whether this genetically unique cell should be considered a human person.” (13)

The single-celled zygote is a very different kind of cell than that of sperm or ovum, and contains a unique genome that will determine most future physical characteristics and functions of the person. (14) However, there is a potential for the conceptus to split into identical twins prior to implantation, and so (the argument goes) the conceptus cannot be regarded before implantation as a single human being. (15) So, does that make this single-celled zygote an independent agent with intrinsic moral value significant enough for it to be considered the initial organism which determines the beginning of pregnancy or life, and hence any act that terminates its progression and growth is to be considered an act of abortion or its equivalent. Or, is this just a pre-embryonic (16) process which leads to pregnancy, and its normative status does not reach the standard of what we would consider pregnancy, and hence to terminate its further development would not be tantamount to abortion but a lesser crime, if at all.

The American Medical Association at its 2004 Annual Meeting, passed a resolution in favour of making “Plan B” emergency contraception available over-the-counter, and one of the claims in the resolution was that hormonal contraception that may affect implantation “cannot terminate an established pregnancy.” (17) Similarly, the British Medical Association has defined an “established pregnancy” as beginning at implantation (18), yet the legal definition in the United Kingdom remains unclear. (19)

Ethical concerns peaked with the introduction of over-the-counter emergency contraception and whether they were considered abortifacients. Birth control methods usually prevent fertilization and this cannot be seen as abortifacient because, by any of the above definitions, pregnancy has not started. However, some methods might have a secondary effect in preventing implantation, thus contributing to the death of the pre-embryo. Those who define pregnancy from fertilization subsequently may conclude that the agents should be considered abortifacients. Because an abortion is defined as ending an established pregnancy, rather than destroying a fertilized egg, depending on when pregnancy is considered to begin, some methods of birth control as well as some methods of infertility treatment might be classified as causing abortions.

Islamic Perspective

Islam recognizes the sanctity of human life and believes it should be protected fully. The killing of a single individual human being is tantamount to the mass murder of the whole of mankind: “...anyone killed a person not in retaliation for murder or for spreading mischief on earth, it would be as if he killed all mankind...(Q. 5:32)” Killing children is specifically condemned. In this regard, the Qurān says: “And do not kill your children for fear of poverty. We provide for them and for you. Indeed, their killing is ever a great sin (Q. 17:31).” (20)

All Muslim jurists consider abortion a serious crime and an act of infanticide (al-w’ad) at the time when the embryo or foetus is considered a child and and/ or a human person. This is usually taken to be at ensoulment. (21) Anything before this, there is a difference of opinion, and most consider it a minor crime, requiring compensation by some. This stage is also termed al-w’ad al-khafī (hidden infanticide) or al-maw’ūdat al-sughra (minor infanticide). (22) Then there is a stage before this, when the woman is not considered pregnant, yet there is intrinsic value assigned to the pre-embryo. This stage is considered synonymous to that of the male ejaculated semen having yet not established itself in the womb. The intrinsic moral value assigned to this semen is consigned the ruling of al-‘azl (coitus interruptus), or withdrawing during intercourse, (22) where such acts are normatively no different to preventing the sperm reaching the uterus

(womb). With regards to al-‘azl, the correct Islamic legal view is that it is permissible, because of narrations from the companions of the Prophet like Jābir, who narrates, “We used to practise al-‘azl at the time when the Qurān was being revealed” – i.e., at the time of the Prophet. If that action had been prohibited, the Prophet would have forbidden it. However, Muslim jurists say that one should not engage in al-‘azl with a free woman except with her permission, because she has the right to have children, or at times of poverty for fear of economical hardship and tribulation. (23-24)

At what stage of pre-human development does the normative state cease to be equivalent to that of al-‘azl, and hence permissible prior to this? And when is it to be considered al-w’ad al-khafī, where most consider it a crime to abort? If preventing fertilization (al-talqīh) by blocking semen is considered acceptable or permissible, then would the rule of al-‘azl extend beyond fertilization of the ovum to the zygote and to what stage of development? There exists a great variety of opinions in the Islamic tradition amongst the contemporary scholars about the exact beginning of human life based on this. (25)

To address this question, the first line of enquiry would be to ask whether classical Muslim scholars recognised the zygote and the equivalent process of fertilization and implantation as we do today.

Classical Interpretations of Equivalence to Zygote

The Qur’ān describes the stages of development of human life

“And verily we did create man from a quintessence (of clay). Then we made it into a nuṭfa in a place of rest, firmly fixed. Then we made the nuṭfa into an ‘alaqa. Then of that ‘alaqa we made a mudgha. Then of that mudgha bone and then, clothed the bones with flesh. Then we developed out of it another creature (by breathing life into it). So blessed be Allāh, the Most Marvellous Creator.” (Q. 23:12-14)

The Qur’ān describes seven stages of development. Quintessence of clay, nuṭfa in a place of rest [womb], firmly fixed, nuṭfa to ‘alaqa, ‘alaqa to mudgha, mudgha to bone, clothing of bones with flesh and finally another creature. We will be focussing mainly on the nuṭfa stage.

There is a ḥadīth (prophetic tradition) which indicates that not the whole of this semen (mā’) actually becomes the child. The companion, Abu Sa’īd al-Khudrī narrates from the Prophet when he was asked regarding al-‘azl, “Not all of the mā’a (semen) becomes a child. If Allāh wills to create something then nothing can prevent Him” (26-27).

This can be interpreted in two complementary ways. Firstly, that only some aspects of the whole semen are essential for creation of man i.e. the *nuṭfa*. Secondly, that the final product which implants in the uterus to create a child does not comprise solely of the male contribution.

Regarding the first interpretation, the *nuṭfa* refers to a small “drop” of liquid (28-30). This should be interpreted as the drop of semen that has the destined sperm. Only 1 sperm out of approximately 3 million get to fertilize the ovum. Therefore, the *nuṭfa* should be seen as just that same drop of liquid from the semen that goes on to contribute to the creation of the zygote. The *nuṭfa* once entering the uterus mixes with the female germinal fluid containing the ovum and fertilizes it in the fallopian tube, and then the zygote which is the product of this fusion (in that very same drop), is transported to the uterus to implant. *Nuṭfa*, though it refers to a physical drop of liquid, represents the stage or process of pre-implantation as would be seen by the unaided eye, rather than at the microscopic level that modern science and its reductionist nature of explanation tends to observe regarding physiological or biological processes. (31) The language used in the Qurān allows for different theories of embryological development, accommodating different understandings of the knowledge of science of that time. (32)

The verse, “While He has created you in stages? [Q. 71:14], Ibn ‘Abbas, Qatāda, ‘Ikrima, Saddī, Ibn Zayd all state that this verse indicates that embryological development is in stages termed – *nuṭfa*, ‘*alaqa* and then *muḍgha* until the last stage of the human person. (33)

The Qurān differentiates *nuṭfa* from semen (*manī* or *mā’*).

Had he not been a *nuṭfa* from (min) semen emitted? [Q. 37:75]

The word “min” here, grammatically indicates the meaning of *tab‘īd* (i.e. a constituent of). This suggests that the *nuṭfa* is a part of the semen. (i.e. the part which contains the sperm that will fertilize the female egg). Yet at the same time the Qurān refers to them in the same manner by describing the *nuṭfa* as being ejaculated in the same sense as semen.

“And He created the two sexes male and female from a drop (*nuṭfa*) when ejaculated (or planned)” [Q. 53:45-46]

This identifies that the *nuṭfa* is also ejaculated with the remaining semen. It could be argued that it would therefore make sense to consider the *nuṭfa* as the sperm which fertilizes, as it is a constituent of the semen and is ejaculated with the semen. However, this would be incorrect.

If we were to accept that *nuṭfa* refers to sperm or the semen generally, then there is a problem as there is no mention of the female contribution. The verse clearly says

further, ““We made (*khalaqnā*) the *nuṭfa* into an ‘*alaqa*”. This would therefore suggest that the child was contained in the man’s seed (sperm) independent of the female contribution and this would be incorrect. We know that the sperm doesn’t become a zygote, rather it fertilizes an ovum, which then becomes the zygote and early stages of man. The more acceptable explanation of this would be that the *nuṭfa* just refers to “a drop of fluid”, and it can be used interchangeably as “a drop from emitted semen which contains the sperm that will fertilize” or, “a drop of fluid as a final product consisting of a fertilized egg (zygote)”. In other words, the Qur’ān makes reference to that constituent drop of semen (which contains the sperm that is destined to fertilize), which will then fertilize the ovum to develop into a zygote, visible as a drop. *Nuṭfa* describes an important process of fertilization related to the mixing of drops, and hence the stage of early human development through the processes of the emission of a drop to a production of a drop that will implant. Just like *mā’a* or *manī* refers to the semen generally and not specifically to what is contained in the semen i.e. sperm + seminal fluid, similarly the *nuṭfa* refers to a drop of liquid which can consist of either semen or/ and the fertilized egg (zygote). The reference here to *nuṭfa* is solely in reference to what would be observed with the naked eye and not to necessarily differentiate between a sperm or semen from a zygote.

Classical Interpretations of Equivalence to Fertilization

Indeed, We created man from a drop mixture (*nuṭfa amshāj*) that We may try him; and We made him hearing and seeing. [Q. 2:76]

The above verse elaborates and describes the *nuṭfa* as a drop “mixture” (*nuṭfa amshāj*) suggesting that there is a process of mixing to create man. In Arabic *amshāj* means mixture, and *nuṭfa amshāj* indicates a mixture of male and female germinal fluids. Muslim scholars agree on deriving this meaning from the above expression. The Muslim exegetists, al-Farā’a (d. 822) claims this *nuṭfa amshāj* to be a fusion (*al-akhlāt*) between male and female fluid, blood and congealed clot (*al-‘alaqa*). (34) al-Baghwī (d. 1122) also states that *amshāj* is to mix (*akhlāt*) (35). al-Ṭabarī (d. 923) asserts that Muslim scholars state that this is the mixing of the male and female fluids. This is supported by the verse of the Qurān. (36)

O mankind, indeed We have created you from male and female [Q. 49:13].

The female contribution (ovum) is at times also referred to as *nuṭfa* (a drop), as both contribute to the final product of zygote. (36) Many of the Qurānic scholars acknowledged that the early human creation was from a mixture of male and female fluid.

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Recognising that Muslim scholars were aware of a similar process resembling what we consider fertilization today, which included the fusion or mixing of male and female germinal fluid, the question arises did they give it moral significance. It could be argued that they were not aware of the degree of significance of fertilization as a determining factor for sexual and genetical/ physical characteristics with its associated biological events, and hence did not give the same value as what they would have, if they had known.

Ibn Abbas narrates that the dominant liquid in gender will determine final gender of child and this is explained as the male liquid (*ma' al-rajul*) meeting the female liquid (*ma' al-mar'a*). (37) He also states that the male and female liquid meet in the uterus and one of them becomes the child. The male liquid is dense white (*abyad ghaliz*) and the female is a light yellow (*asfar raqiq*). (38)

Ibn 'Abbās's statement suggests two things; firstly that the equivalence to what we consider fertilization occurs in the womb, and secondly that the dominant liquid in gender will determine final gender of child.

In relation to the first point, there are many accounts from classical Muslim scholars that clearly identify that they believed that this process of *nutfa amshaj* occurring in the womb was after the *nutfa* was established in the womb (i.e. equivalent to what we would consider implantation), which is quite a different understanding to what we know of today. We now know that fertilization occurs in the fallopian tubes before implantation.

In relation to the second point, that the dominant liquid in gender will determine final gender of child, we now know that this is related to the time of conception determined by chromosome characteristics - and it will be the male (or rather the male's sperm) that determines whether the child will be a boy or a girl. Prior to fertilization, the unfertilized egg carries an X chromosome while the sperm can carry either an X or a Y chromosome. The gender of the zygote comes down to one simple event: If the sperm carrying an X chromosome fertilizes the egg, a girl will be conceived. If the sperm carrying a Y chromosome fertilizes the egg, a boy will be conceived. This however has been described as the mixing of two liquids (male and female contributions) equivalent to what we consider fertilization.

This information about sex determination is narrated in the Qur'an:

“And He created the two sexes male and female from a drop (*nutfa*) when ejaculated”. [Q. 53:45]

Furthermore, when the Prophet was asked about the reason why the child sometimes resembles the father and other times the mother, he responded, “when the semen of the male dominates the germinal fluid of the female, then it (the child) will resemble him (the father) and if the female germinal fluid dominates the male then it (the child) will resemble her (the mother). Ibn Qayyim (d. 1350) asserts that the liquid of the man does not alone lead to birth of a child, until it mixes (*yumazij*) with another essence (*mada ukhra*) from the woman. He further elaborates that the limbs, body parts and form are determined by meeting of these two germinal fluids. (39)

Sayyid Qutub (d. 1966), a contemporary scholar of exegesis explains that *al-amshaj* is to mix (*al-akhlat*) and he further asserts that this is sometimes taken as the formation of the *nutfa* from the male gamete and female egg after fertilization and sometimes the fusion of the chromosomes in the *nutfa* which science refers to as “genes”. (40)

Moral significance of the Equivalence to Fertilization

Classical Muslim scholars acknowledged that it was at this stage of fusion/ mixing, that a male and female contribution led to sex determination and parental characteristics. (36) Having determined this, most still considered aborting at the *nutfa* stage as not problematic to the degree where it would be considered infanticide *al-wa'd*. However, they accepted that this was not identical to the state of *al-'azl* and held higher normative value. It was the beginning of the means to life of the foetus, but for most, it still did not hold the same moral consequence of abortion (*saq/ ijhad*) of an embryo which was seen in the *'alaqa* and *mudgha* stages in the uterus. Muslim jurists morally differentiated the *nutfa* stage from that of *'alaqa* and *mudgha*. (41)

The moral significance of the mixing or fertilization was addressed explicitly by scholars like al-Ghazali (d. 1111), who holds conservative views on the issue and claims the beginning of the means of existence (*mabda'u sabab al-wujud*) is when the semen locates in the womb (*wuqu' almani fi al-rahm*), and not when it exits the urethra of the male (*viz.* equivalent to *al-'azl*) because the child is not created from the semen alone but from a combination of germinal fluids of both mother and father. He then asserts that, “this prepares it for life”. In other words it is not considered alive as yet, but has the potential. Interestingly he also mentions this is either when the liquid of the man mixes or fuses with the woman's liquid

or her blood. (42)“It is at this point that aborting is a crime”. He deduces this from the legal analogy (qiyas) based on the contractual relationship which follows the proposal (al-ijab) and its acceptance (al-qabul) in a marriage contract. Then he states, “Any stage before this is not of same moral value,” which suggests he would be referring to before implantation as all jurists concede that post-implantation is not like that of al-‘azl and is considered a significantly higher normative state. Classical Muslim jurists believed that the mixing occurred once implantation had occurred (i.e. the nutfa was firmly established in the uterus). He also admits that aborting in the ‘alaqa and mudgha stage is a greater crime, suggesting that he differentiates between the nutfa stage and the other stages, claiming the former to be of a lesser crime. (36) (43)

We know fertilization occurs before implantation and not the reverse, so how does this impact the application of these normative judgements? It is important to note that for most jurists moral significance wasn’t applied directly or explicitly to fertilization to the degree it was applied to implantation. Ibn ‘Arabi MalikI (d. 1148) is explicit about the normative sequence of events yet doesn’t address the issue of ikhtilat. He describes three states (1) ejaculated semen which enters the female reproductive system (viz. considered the al-‘azl stage), (2) implantation of the semen (described as an essential stage where abortion is considered a criminal offence), and then finally, (3) ensoulment. (44)

One good explanation for this could be that implantation was considered a defined stage that determined the initiation of the less defined process of ikhtilat. And ikhtilat was only acknowledged to have happened when the nutfa had become an ‘alaqa. This phase between fertilization and implantation would be considered a time, where to terminate would be of a greater crime than that of al-‘azl and a lesser crime than that after implantation.

Moral Significance of the Equivalence to Implantation

Most Muslim jurists consider life to begin at the time when the nutfa establishes itself in the womb. Pregnancy is described in its technical and legal sense as, “that which is in the womb of a woman, as a child, be it male or female”. (29) This could be because of the understanding that a greater chance for pregnancy is secured once it is established in the uterus. The establishment in the uterus, and also that the embryo has developed enough to accept life, are two important factors which define pregnancy. Any action leading to abortion after this point is seen as a greater crime.

The Quran explicitly describes the fertilized drop (nutfa amshaj) as being lodged firmly in the uterus.

Then We placed him as a nutfa in a firm lodging (qararin makin). [Q. 13:23]

There is moral significance identified when the embryo (nutfa) implants or lodges in the womb. Its place in the womb is seen as pregnancy (al-haml) and many Muslim scholars have considered this event as the point after which the conditions of al-‘azl no longer apply but more stringent conditions are required to terminate, as this would be considered abortion (ijhad). However, we have ascertained that moral value should also be given to the nutfa amshaj or the zygote. Considering that we now know that the zygote nutfa amshaj comes before implantation, (previously assumed to have been after implantation), Muslim jurists will need to decide whether the stage between fertilization and implantation is normatively equivalent to al-‘azl or somewhere inbetween where it holds a normative value more than al-‘azl and less than that after implantation. One approach to this would be to assign it the legal normative state of nutfa, as we are aware that the Quran terms it nutfa amshaj and classical Muslim jurists have provided some idea of their position on the normative value of the nutfa. This would be a more cautious or conservative position, something Islamic legal jurisprudence encourages in such circumstances.

If that is the case, then those who claim that aborting the nutfa is permissible, would accept interventions that act after fertilization, or it may need to qualify more stringent conditions to be accepted, whereas those who don’t permit aborting the nutfa demand higher competing factors to justify abortion or any intervention on the zygote.

The Maliki scholars are generally the most conservative. Dardir (d.1786), declares that, “It is not permitted to abort implanted semen in the womb even if it be before 40 days and when it is ensouled then it is prohibited (haram). Al-Dusuki (d.1815) elaborates, “This is the more authentic Maliki opinion ...it is as if it is not permissible to abort when the semen is established in the uterus even though the nutfa is in its first stages.” (45) For them the nutfa holds a high moral status and any intervention post-fertilization which terminates its growth and development would be a crime and tantamount to abortion.

The remaining sunnī schools consider it permissible to abort nutfa, with stricter conditions than al-‘azl, after alaqa or mudgha stage once the human form (takhliq) becomes apparent these conditions are graver. The Ḥanbalī and Shafii jurists prohibit when human form is visible in its initial stages (after ‘alaqa stage approx. 80 days gestation), whereas the majority position of the Hanafis is when the foetus is fashioned in complete form (after mudgha stage approx. 120 days gestation).

Ibn Qudama (d.1223) states, “If it is aborted whilst there is no human form then there is no problem with this, as

we do not know it as a janin (foetus)...If it is miscarried as a mudgha and this is witnessed by reliable midwives and there is some form then a ghurra will be required. If it is witnessed that it is in beginning form and there is only part human form, then there are two opinions. The sounder opinion is that there is no issue as it is not fashioned and it is not obligatory like an 'alaqa. (46-48)

According to al-Nawawi (d. 1277), "a ghurra is obligatory when there is, due to the crime of abortion, a form of a human. Like eye, ear, hand and other parts, even if part suffices and the whole is not a condition... if the midwives were to state that there are no hidden features, rather it is a whole human even though there remains to be fashioned then there will not be an obligatory ghurra according to the school. (49)

Abu Ishaq al-Maruzi Hanafi (d. 951) permits abortion of nutfa and 'alaqa and transmits this from Abu Hanifa. After implantation there is the potential for takhallaq, which is a preparation for ensoulment, and this is not like al- 'azl. (50) The scholars differentiate between al-'azl and implantation (istiqrar). The latter being the requisite for takhallaq. The former, al-'azl is not a medium for life of the person as is seen after implantation.

The more conservative Hanafi jurist 'Ali ibn Musa, considers this as being disliked (karaha) because semen after having located in the womb its outcome is life and it is then given the hukm ruling of life just like the egg of the prey in the haram (the holy site Makka). Others also assert the same and to abort requires a shari excuse or qualification (al-'uzr). (51)

Conclusion

It has been concluded that most classical Muslim jurists and scholars saw the beginning of pregnancy (al-haml) from the point of their equivalence of implantation, but this was partly because they assumed ikhtilat to have occurred after implantation and not before. The moral status of the embryo implanted in the uterus is greater than that which precedes this. That is not to say that what precedes this in the nutfa stage does not hold intrinsic value, rather lesser competing conditions are required to justify ceasing the process of development at this stage but more than al-'azl. It is best to be cautious and hence a good position would be to judge the moral legal crime of abortion in its equivalence to the nutfa stage, as this is how the Quran terms it, which would require more stringent conditions for all sunni schools, except the Malikis who prohibit.

This would suggest that intrauterine device (IUD) and emergency contraception would be an acceptable means of contraception within conditions requiring more hardship than that which is required at al-'azl and the

same would apply in cases of reproductive technologies like IVF and stem cell research.

Besides this, there is growing evidence that even if we were to accept abortion post-fertilization, intrauterine devices and emergency pills are shown not to lead to harm of the zygote once fertilized and would therefore be considered safe to use. (52)

References

1. "Pregnancy" The American Heritage Stedman's Medical Dictionary, Houghton Mifflin Company Sept 2002
2. Mosby (2012). Mosby's Medical Dictionary. Elsevier Health Sciences. p. 415; Dorland (2011). Dorland's Illustrated Medical Dictionary. 32nd Edition, Saunders. May 2011
3. "Sex Selection" (PDF). ACOG. Number 360, February 2007. <https://web.archive.org/web/20150610232320/http://www.acog.org/~media/Committee%20Opinions/Committee%20on%20Ethics/co360.pdf>
4. "Conception". Merriam-Webster. <https://www.merriam-webster.com/dictionary/conception>, retrieved July 2019
5. Moore KL, Persaud TVN. The Developing Human, 7th ed. Philadelphia: Saunders-Elsevier, 2003; 31
6. Carlson BM, Human Embryology and Developmental Biology, 3rd ed. Philadelphia: Mosby-Elsevier, 2004; 2, 8-10, 31.
7. Report on Criminal Abortion, JAMA, Vol XII-6, 1859.
8. ACOG Terminology Bulletin. Terms used in reference to the fetus. Chicago. ACOG No. 1. Sept 1965. Dr. Bent Boving argued for changing the definition by moving the date of conception from when fertilization occurs to when implantation occurs. He said that "the social advantage of [birth control] being considered to prevent conception rather than to destroy an established pregnancy could depend upon something so simple as a prudent habit of speech." Bent Boving, "Implantation Mechanisms," in Mechanics Concerned with Conception, ed. C.G. Hartman (New York: Pergamon Press, 1963), p. 386. Accessed July 2019 from https://en.wikipedia.org/wiki/Beginning_of_pregnancy_controversy.
9. The American College Dictionary, Random House, NY: 1956. p. 249.; Stedman's Medical Dictionary, Williams and Wilkins Co. 21st ed, Baltimore 1966. pp. 352,583,586.

10. Webster's New International Dictionary of the English Language Unabridged, Merriam-Webster, Encyclopedia Britannica, 1986. pp. 469.
11. Merriam-Webster Deluxe Dictionary, 10th collegiate Ed., Readers Digest, Pleasantville, NY, 1998. pp. 373,677,671.
12. Tabor's Cyclopedic Medical Dictionary. 14th edition, FA Davis Co, Philadelphia., 1981. p. 322.
13. Eberl JT. The beginning of personhood: A Thomistic biological analysis. *Bioethics*. 2000;14(2):134-157. Quote is from page 135.
14. Müller-Wille S. Cell theory, specificity, and reproduction, 1837-1870. *Stud Hist Philos Biol Biomed Sci*. 2010;41(3):225–231.
15. Ashley, Benedict and O'Rourke, Kevin. *Ethics of Health Care: An Introductory Textbook*, (Georgetown University Press 2002). p. 127
16. the term "pre-embryo" has been used to describe the conceptus before implantation in the uterus. Spallone, Patricia. "Bad Conscience and Collective Unconscious: Science, Discourse and Reproductive Technology" in Rosenbeck, Bente et al. p. 131-132 (Museum Tusulanum Press 1995).
17. FDA Rejection of Over-The-Counter Status for Emergency Contraception Pills American Medical Association House of Delegates Resolution:443. Retrieved July 2019
18. BMA (May 2005). "Abortion time limits: A briefing paper from the British Medical Association". Archived from the original on 2006-08-27. Retrieved July 2019. "The term 'abortion' is used throughout this paper to refer to the induced termination of an established pregnancy (i.e. after implantation)."
19. Hope, T. & Savulsecu, J. "Handout 3: Outline of Legal Positions in England and Wales". *Medical Ethics and Law Teaching Materials: Termination of Pregnancy*. The Oxford Centre for Ethics and Communication in Health Care Practice, Oxford University. pp. Appendix 3: Some key points in the law on abortion and fetal damage.– "It is generally assumed that when the Act states that 'pregnancy has not exceeded its 24th week' it means 24 weeks since the first day of the woman's last period. But this is not clear – particularly if there is evidence that conception had taken place on a day after this....The Attorney General said, in 1983 that there is no pregnancy until implantation. This is persuasive but not binding precedence." "Termination of Pregnancy Handout (pdf)" (PDF). <http://www.ethox.org.uk/education/teach/pregnancy/pregnancy3.htm> accessed July 2019
20. See also Quran. 6:137, 6:140, 6:151
21. Majority of Muslim jurists consider ensoulment at 120 days gestation. Musallam BF. 1983. *Sex and Society in Islam: Birth Control before the Nineteenth Century*. Cambridge: Cambridge University Press.
22. The compensation is a ghurra – the value of the ghurra is usually one-twentieth of the diya, Katz MH. 2003. The problem of abortion in classical Sunni fiqh. In: Brockopp (ed). *Islamic Ethics of Life: Abortion, War and Euthanasia*. Columbia: University of South Carolina Press. p.28
23. Bukhārī, Ṣaḥīḥ al-Bukhārī, Kitāb al-Nikāḥ, Bāb al-ʿAzl;
24. The council of Islamic Fiqh Academy, 5th session, held in Kuwait 10-15 December 1988, Islamic Fiqh Academy. Resolutions and Recommendations 1406-1409 H/1985-1989, 36. Jeddah: Organization of the Islamic conference; Resolution No 1 concerning Birth Control
25. January 15–17, 1985, the Islamic Organization for Medical Sciences (IOMS) held a symposium in Kuwait with about 80 biomedical scientists and religious scholars participating, Ghaly M, The beginning of human life: Islamic bioethical perspectives *Zygon* (2012) 47 (1):175-213
26. Muslim, Ṣaḥīḥ al-Muslim, Kitāb al-Nikāḥ, Bāb al-Ḥukm al-ʿAzl, ḥadīth no. 1438
27. ʿAynī, ʿUmdat al-Qārī, Idārat al-Ṭibāʿat al-Munīriyya (2011), 20:196
28. Ibn Ḥajar, Faḥḥ al-Bārī Dār al-Risālat al-ʿĀlimiyya (2013), 11:479
29. Ibn Manẓūr, Lisān al-ʿArab Dāru Ṣādir, Beirut (2013) 10:74
30. al-Zubaydī, Tāj al-ʿUrūs min Jawāhir al-Qāmūs, Ṭabʿatu al-Kuwayt, (2008), 24:423
31. Brigandt, Ingo and Love, Alan, "Reductionism in Biology", *The Stanford Encyclopedia of Philosophy* (Spring 2017 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2017/entries/reduction-biology/>>. Accessed July 2019
32. "The style of the Qurān in expressing these five sciences is according to the first Arab's method of demonstration and not of the later scholars. Examples are given of these differences amongst the early Arabs and later scholars." Al-Dihlawi, Shah Wallī Allah, *Al-fawz al-kabir fī Usul al-Tafsir*, Bayt al-ʿIlm al-Karatashi (2006), p.15-16

33. Shākir, al-Shaykh Aḥmad, 'Umdat al-Tafsir min 'an al-Hafiz Ibn al-Kathir, Dar al-Wafa, (2005), 3:614
34. Al-Dabyan, Al-Hayd wa al-Nifas wirayatan wa dirayatan, Dar al-Asda' al-Mujtam' 1: 1233
35. Ibn Khalqan, Wafayat al-A'yan, Dar al-Sadir, Beirut (1972) 2:137
36. Tabari, Tafsir al-Tabari, (2008) Dar al-Hijr, 23:89
37. Ibn al-Kathir, al-Quran al-Azim, Dar Ibn Ḥazm, (2000) p. 164
38. Baghwi, Mualim al-Tanzil fi Tafsir al-Quran, Dar Tabiyya, 8:292
39. Ibn Qayyim, al-Tibyan fi Aqsam al-Quran, Dar al-Ma'rifa, Beirut, p.335-36
40. Al-Qutub S, Fi Zilal al-Quran, Dar al-Shuruq (1972) 6:3776
41. There are other important considerations which differentiated 'alaqa and mudgha from nutfa such as takhlīq (created form). This, though important, is not directly relevant here and hence will not be discussed
42. The reference here to blood was seen to be related to menstrual blood – an ancient Aristotelian understanding that the embryo requires menstrual blood to develop. Aristotle (384 – 322 BC) was a Greek philosopher and scientist who wrote over 400 books on many different branches of learning. (Ogle, W. Aristotle on the Parts of Animals, Kegan Paul, London, 1882).
43. Al-Ghazali, Iḥya 'Ulum al-Din, Dar al-Fikr, 2:59
44. Ibn al-'Arabi, al-Qabs fi Sharh Muwatta Malik, Dar al-Gharb al-Islami (1989) 2:7
45. Dusuqi, Hashia al-Dusuqi 'ala al-Sharh al-Kabir li-Dardir, Dar al-Fikr (2010), 2:266
46. Ibn Qudama, al-Mughni, Dar al-Kutub al-'Ilmiyya, Beirut, 7:806
47. Buhuti, Kishaf al-Qina' 'an Matn al-Iqna', Dar al-Fikr (1986) 6:24
48. Ibn al-Jawzi, Ahkam al-Nisa', Maktabat al-Turath al-Islami, Cairo, p.109
49. Nawawi, Rawdat al-Talibin wa 'Umdat al-Muftiyin, al-Maktab al-Islami, (1991) 9:37
50. Haythami, Ibn Ḥajar, Tuhfat al-Muḥhaj fi Sharh al-Minhaj, Dar al-Kutub al-'Ilmiyya, Beirut, (1971) 3:169
51. Ibn 'Abidin, Hashia Ibn 'Abidin, 'Alim al-Kutub (2009) 6:591
52. Ortiz, ME et al, Post-coital administration of levonorgestrel does not interfere with post-fertilization events in the new-world monkey Cebus paella, Hum Reprod. 2004 Jun;19(6):1352-6; K.Gemzell-Danielsson, L.Marions, Mechanisms of action of mifepristone and levonorgestrel when used for emergency contraception, Human Reproduction Update, Vol.10, No.4 pp. 341–348, 2004; Duranda M et al., On the mechanisms of action of short-term levonorgestrel administration in emergency contraception, Contraception 64 (2001) 227–234

Abortion – an Islamic perspective

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Background

Abortion is defined as the termination of pregnancy before viability i.e. ability of conceptus to survive outside the womb. The foetus is generally considered viable after 24 weeks of pregnancy. Although widely practiced worldwide, there has been much debate as to whether abortion is ethically acceptable. In the UK, abortion is legal (under certain conditions) and is widely practiced in the National Health Service (NHS). For many years, Muslim health professionals in the NHS have been frequently asked to get involved either directly or indirectly with abortion. However, there appears to be a lack of clarity amongst the majority of these professionals on the Islamic position on this important matter. We have therefore conducted this review aiming to establish a balanced and evidence-based Islamic verdict on abortion based on the most widely accepted Islamic views taking into consideration current medical knowledge.

Principals of Islamic rulings

In general, Islamic guidance is primarily sought from Islamic Religious Texts (IRTs) including Quran and authentic Prophetic Hadith. In the absence of a direct IRT, Islamic rulings are usually provided by reputable and respected Scholars either as individuals or institutions based on specific and well-documented evidence. This evidence could include indirect IRTs, rulings on similar issues (Qiyas), or well-established Islamic Principles (Usool). In Islam, no scholar has the authority to produce a verdict on any matter without providing an acceptable evidence. In their effort to reach a valid Islamic ruling, scholars need to have a good understanding of the subject matter and to be fully aware of all cultural circumstances of the population concerned. They also need to consider all potential consequences of their rulings. All these require input from multidisciplinary experts from the various fields.

Over the centuries, many Imams, schools of Fiqh (madhhabs) and scholars have produced different rulings

on various issues concerning Muslims. Many of these rulings need to be reviewed and updated by contemporary scholars in view of emerging new information. Furthermore, current scholars need to address new issues that were not known to the predecessors. In recent years, there has been a greater focus by scholars to collate their efforts in research papers and articles, which can be widely available for those seeking the Islamic stance on various issues (1, 2, 3). The Islamic Code of Medical Ethics (4) being a good example of this.

Methodology

In this essay, the opinions of the main schools of thought were considered, as well as sources that deal with the medical aspect of abortion in relevance with Islam. A wide range of sources were used in order to improve the accuracy of the information included, such as web articles, journals and books. The sources themselves were found via online search engines such as Google Scholar, and databases such as Medline and PubMed.

Findings

1. Islamic principles relevant to abortion

The first Islamic principle that should be considered when tackling the topic of abortion is the Sacredness of human life. Allah SWT says "Take not life which Allah has made sacred" (6:151). In another verse Allah says, "If a man kills a believer intentionally, his recompense is Hell, to abide therein (for ever)" (4:29). The position of Islam on killing children is also clear according to the qur'anic verse "Kill not your offspring for fear of poverty; it is we who provide for them and for you. Surely, killing them is a great sin." (17:32)

Another important principle in Islam is that a mother should not be harmed by her child. Surah Baqarah, 2:233: "A mother should not be made to suffer because of her child."

The third principle, which is well-established in Islam is the prioritisation of matters according to level of importance. This is called ‘al-ahamm wa ‘l-muhimm’ meaning that priority should be given to the more important before the less important. This is further supported by the Hadith in which the Prophet (SAW) says ‘when two forbidden things come [upon a person] together, the lesser will be sacrificed for the greater’

2. Ensoulment of the human embryo:

Knowledge about Ensoulment can only be sought from a divine source including the Qur’an or authentic Hadith. The only evidence for this is the Hadith narrated by Abdullah ibn Mas’ud as follows: the Messenger of Allah (Allah bless him & give him peace) said: “The seed of one of you remains in the womb of the mother for forty days in the form of a Nutfa. Then it remains like a Alaka for forty days, and then for a same number of days like a Mudgha “ (Sahih al-Bukhari & Sahih Muslim). According to this hadith, many Islamic scholars stated that the soul enters the foetus at 120 days (Faqeeh Ibn Abidin, Radd al-Muhtar, 1/202). Considering the four main schools of thoughts within Sunni’s, both the Hanafi and Shafi schools as well as the Shiite jurisprudence believe (5) that ensoulment occurs around day 120. (Radd al-Muhtar, 1/202). On the other hand, the Maliki and Hanbali schools believe this to occur by day 40 (6). This difference in opinion largely rises from a difference in interpretation from the aforementioned Hadith.

According to our understanding of the embryonic development, when we put the above hadith against the table of embryonic development we will find that the three stages mentioned in the Hadith including Nutfa, Alaqa and Mudgha do not take as long as 120 days, but only 40 days. Based on this knowledge, it is possible to conclude that ensoulment occurs after 40 days.

3. Ensoulment and acquisition of full human status

An area of significant controversy is the point at which the embryo/foetus becomes a full human. Many Muslim Schools of Fiqh believe that ensoulment coincides with the establishment of a full human with all his/her due rights (7).

4. The UK law:

The Abortion Act (1967) states that a pregnancy may be ‘terminated’ if ‘the pregnancy would involve risk to the life of the pregnant woman’; included in the definition of ‘risk’ is risk to ‘mental and/or physical health’. The law also allows abortion if the child is to be born with ‘physical or mental abnormalities’ (8). The Islamic perspective also correlates with the guidelines given by the Royal College of Obstetrics and Gynaecology, which states that ‘over 98%’ of abortions are given on the grounds of there being a ‘risk to health’ of the mother, with only a ‘minority’ of pregnancies terminated on the grounds of ‘foetal

abnormalities’ (The Care of Women Requesting Induced Abortion, 2011).

5. Permissibility of abortion on medical grounds

Based on the above, and the general consensus amongst Scholars, it is now clear that abortion at any stage is permissible when the pregnancy poses a definite risk to the life of the mother, which is deemed to be higher than the risk of abortion as determined by a qualified physician (6, 9).

What, however, is the opinion on permitting abortion when it is the foetus who is likely to be born with severe abnormalities? This was initially believed to be unlawful, based on the Quranic verse “Kill not your offspring for fear of poverty; it is we who provide for them and for you. Surely, killing them is a great sin.” (17:32) (10). In 1990 however, the Islamic World League released a ruling that ‘allowed abortion if the foetus with an untreatable severe condition’, provided that this is performed within the first 120 days (10). Examples of such conditions include ‘lethal foetal anomalies’ such as anencephaly, trisomy 13 and 18, and severe hypoplastic left heart syndrome.

6. Permissibility of abortion in the absence of medical reasons

All the main schools of thought agree that abortion is not permissible after ensoulment in the absence of a valid medical reason (7). The two main differences in opinion concern the exact timing of ensoulment and the permissibility of abortion before ensoulment (i.e. from day 1 of the pregnancy). The timing of ensoulment has been clarified above.

With regards to abortion before ensoulment, the juristic stance is varied amongst the schools of thought. On one hand, Shafi’i and Hanafi allow abortion before ensoulment (some Shi’i, 40/42 days; Hanafi and some Shafi’i, 120 days).

On the other hand, a significant body of scholars consider abortion a major sin emphasising that the embryo enjoys a right to life from day 1. This school, however, allows abortion in exceptional circumstances such as difficulty on the family, with a recommendation to abort as early as possible. It is worth mentioning, however, that a majority of scholarly opinions strongly prohibit abortion if it is performed purely for fear of shortage of provision for the new-born.

7. Health professionals and abortion

It is likely that a significant part of abortions undertaken in the NHS is not permissible from an Islamic perspective. In addition, it is neither practical nor realistic for Muslim doctors to pick and choose which abortions they will or will not be willing to get involved with. It is therefore recommended that Muslim doctors should be advised

to completely avoid taking part in the provision of abortion. It is worth mentioning that the law allows Health Professionals to avoid certain practices on religious grounds. Doctors should however provide care for women suffering from complications due to abortion.

8. Conclusion and final verdict

Based on the above we can conclude that abortion is prohibited beyond 40/42 days from conception except for medical reasons determined by a qualified physician. Before this, abortion may be allowed only in certain circumstances, preferably after seeking fatwa on individual bases.

References

1. Padela, A. (2007). Islamic Medical Ethics: A Primer. *Bioethics*, 21(3), pp.169-178.
2. Sachedina, A. (2005). End-of-life: the Islamic view. *The Lancet*, 366(9487), pp.774-779.
3. Badakhsh, M., Balouchi, G. and Balouchi, A. (2016). Abortion and its Different Approaches in Islam: A Review Article. *International Journal Of Pharmacy & Technology*, 8(3), pp.4783-4789.
4. The Islamic Code of Medical Ethics. (1982). *World Med Journal*, 29(5), pp.78-80.
5. Amaresh, K. (2006). A Shiite Perspective Toward Abortion. *Journal of Medical Ethics, Medical Ethics and History of Medicine Research Centre*, 1(1), pp.37-39.
6. Dilawar, D., Afshar, S. and Rahimi, D. (2017). Islamic Edicts on Family Planning. 1st ed. [ebook] Ministry of Health and Medical Education. Available at: <https://www.al-islam.org/printpdf/book/export/html/11931>.
7. Badawy, A. (2013). Divergent Views on Abortion and the Period of Ensoulment = وضاهجإلا لوح ءارآلا دعابآ = حورلا خفن ؤرتف. *Sultan Qaboos University Medical Journal*, 13(1), pp.26-31.
8. The Care of Women Requesting Induced Abortion. (2011). 3rd ed. [ebook] London: RCOG Press. Available at: https://www.rcog.org.uk/globalassets/documents/guidelines/abortion-guideline_web_1.pdf.
9. Musallam, B. (1983). *Sex and society in Islam*. 1st ed. Cambridge: Cambridge University Press.
10. Al-Alaiyan, S. and AlFaleh, K. (2012). Aborting a malformed fetus: A debatable issue in Saudi Arabia. *Journal of Clinical Neonatology*, 1(1), p.6.

Contributions of Arab and Muslim Oculists to Ophthalmology

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Abstract

This article is a summary which aims to cover the main aspects of the book written by M. Zafer Wafai, and is written as a condensed reference point for those researching the contributions and influence of Arabs and Muslims to the medical field generally, and to ophthalmology specifically. The book covers the work of individuals between the 9th century AD (early 3rd century AH) and the late 14th century AD (middle 7th century AH).

The book is divided into two main parts, part one highlighting the books specialised in ophthalmology, written by ophthalmologists, and the second part discussing the chapters of ophthalmology in Arabic textbooks of general medicine. This article looks into some of the notable figures mentioned in part one of the book, focusing on their works and a summary of some major aspects in their lives.

Introduction

In the words of Julius Hirschberg, in his book titled ‘The History of Ophthalmology’ (1): “The Arabs held high the torch of medical science in all parts of Islamic world, from the river Oxus to the Guadalquivir. They added a new knowledge at the time when in the European countries a nearly complete darkness had settled. I would like to mention here only that the European ophthalmologist is of the middle ages had no other teachers than the Arabians...”

From this retrospective historical evaluation we have to recognise that the Arabian contributions to ophthalmology are permanent and will forever be engraved in the book of history.” (1).

In Daarul-Hikmah (The House of Wisdom) in Baghdad around 133 AH during the time of the Abbasid Caliph Al-Mansur master physicians and translators were employed to translate major books from the Greek, Persian, Hindu and Assyriac languages into Arabic. Among the 47 mentioned in the literature were Georgis Ibn Jebri Ibn Bukhtyashu, Hunayn Ibn Ishaq Al-Abaadi, his son Ishaq Ibn Hunayn and his nephew Hubaish Al-A'asam.

Around 400 AH (1010 AD) a new era began following the gathering of sufficient wealth of translated works and knowledge by Arabian intellectuals. During this period, numerous scholars emerged in many fields from

geography, astronomy, medicine, mathematics, and other key accomplishments in literature and history. The amalgamation of knowledge allowed for the compilation of numerous major medical encyclopaedias, the Latin translation of which remained the main – and perhaps the only – source of teaching material in European universities until the latter part of the 15th or 16th centuries.

Among those who translated from Arabic into Latin were Demetrios, and Constantini Africani who translated several medical encyclopaedias including ‘The Royal book’ by Ali Ibn ‘Abbās Al-Ahwāzi (died 994AH), ‘Al-Qānūn fi Al’Tibb’ by Ibn Sīnā, and ‘Al-Hāwi’ by Al-Rāzī. Demetrius and Constantini claimed that the knowledge in their respective translated pieces was their own, in Galeni Liber de Oculis translates a Demetrio and Liber de Oculis Constantini Africani, J. Hirschberg identifies Hunayn Ibn Ishāq as the original author, who wrote ‘Book of the Ten Treatises on the Eye’.

Among other translators was Gerard of Cremona (1147-1187 AD) who upon instructions from Emperor Friedrich II translated into Latin a number of major Arabic books such as ‘Al-Hāwi’ by Al-Rāzī, ‘Al-Qānūn’ by Ibn Sīnā, and ‘Altasrif’ by Abu Al-Qāsim Al-Zahrāwi. Later, in 1547, Andreas Alpago – a great admirer of Ibn Sīnā – travelled to Cyprus, Syria, and Egypt to learn Arabic and proceed to improve the translation of ‘Al-Qānūn’ which served as a primary reference to the medical profession until the late 18th century (3,4,5).

Arabian scholars therefore through their translation of the ancient scientific books had closed the gap between ancient knowledge and the Renaissance era, allowing for Latin Europe's emergence into Renaissance.

Some of the Muslim and Arab Oculists' contributions to Ophthalmology (2, 3, 4):

1. Jibrāil (Jibrīl) Ibn Bakhtyashū Ibn Georgis (Jerjis) [Died 214 AH = 828 AD]

His book is (Treatise about the Optic Nerve)

There are no known manuscripts of this book, with Al-Samarrai mentioning one manuscript in Aleppo in a private collection of Al-Jarrah.

2. Yūhanna Ibn Māsawayh [190-242AH = 815-865AD]

Ibn Masawayh wrote few books:

1. Daghāl Al-'Ayn (The Alteration of the Eye)
2. Knowing the ophthalmology profession questions and answers
3. A book about the structure of the eye, its diseases and medications
4. A treatise about the eye

Max Meyerhof mentions in the introduction of his book 'Ten treatises of the Eye' that two copies of the first two books above exist in Cairo, Egypt and in Leningrad, Russia. Sezgin (8), added the latter 2 books above and mentions the location in Aleppo.

3. Hunayn Ibn Ishāq Al-'Abādī [194-264AH = 809-877AD]

Hunayn Ibn Ishāq Al-'Abādī was born in Al-Hirā in the north-east of Syria. He studied medicine in Jundisabour in Southern Persia under Yūhanna Ibn Māsawayh, then travelled to master the Greek and Arabic languages. Names Juhannitus by Latin translators, Hunayn displayed strong demand for Syriac (his first language), Persian, Greek and Arabic.

Hunayn was one of the founders of Dārul-Hikmah (House of Wisdom) in Baghdad, and worked as a chief translator of the Greek, Syriac and Persian books in numerous fields of science, including medicine, botany, mathematics and astrology. Amongst his legacy is the Hunayn School of Translation, which his son Ishāq and his nephew Hubaysh Al-'Aasam inherited.

Additionally, Hunayn was a prominent position and ophthalmologist authoring several books (6):

1. Ten Treatises on the Eye

2. The book about the Eye in question and answer format
3. Treatise about the structure of the Eye
4. Treatise about how to choose Eye Medications
5. Treatise about the surgical treatment of Eye Diseases
6. Summary of Galen's Book on the eye diseases

The most significant of which is the 'Ten Treatises on the eye', later translated thrice, twice into Latin and once into English by Professor Max Mayerhof and published in Cairo in 1928. As aforementioned, Hirshberg refuted the claim to ownership of Demetrios and Constantini Africani, as 'Ten Treatises on the Eye' was authored by Hunayn and translated by the two.

This book in particular gained its fame as it was the first of its kind to be written very meticulously precisely what is now common in the writing of textbooks. Furthermore, it contained the first drawing of the eye with its six muscles which Hunayn added the retractor bulbi muscles – only found in certain classes of mammals – and the optic nerve. Meyerhof notes in the introduction to the English translation of 'Ten Treatises on the Eye' that it was "the oldest known book written in a scientific and academic way", and that "it is the first book to contain the first known drawings of the eye and its components, and it is much better than the drawings of European books written much later."

The book was so important that most, if not all, Arabian, Persian and Turkish authors later followed Hunayn's method of writing textbooks.

4. Thābit Ibn Qurrah Al-Harrānī [211–288 AH = 823–900AD]

Born and raised in Harrān, Mesopotamia, he moved to Baghdad during the reign of Caliph Al-Mu'tadid (Billāh) and enjoyed a high rank in the Caliph's court, mastering several languages including Aramaic, Greek, Syriac and Arabic. He was a philosopher, mathematician, astrologist and esteemed physician, later becoming the personal physician of Caliph Al-Mu'tadid.

His book 'The Vision and the Perception', though small in content, was quoted by most of the ophthalmologists who followed him including in the books 'Al-Hāwī' (9) and 'Al-Kāfī' (10).

Thābit Ibn Qurrah's most notable contribution was his treatment of amblyopia (lazy eye) by closing the normal eye with a patch to "force the visual spirit to go to the lazy eye in order for the vision to improve".

5. Abu 'Alī Khalaf Al-Tūlūnī [Died 302 AH = 914 AD]

Abu Khalaf was mentioned by Usaybi'a, "...is the first Muslim among the authors of Arabian books on

ophthalmology.” His book was about the final objectives and about the composition of the two eyes and the constitution, the treatment, and the medications.

6. Abū ‘Abdullāh Mohammad Ibn Sa’īd Al-Tamāmī Al-Maqdesī [Died 980 AD = 369 AH]

A famous physician who practised in his hometown, Jerusalem, around 980 AD later moving to Egypt. He mainly specialised in the gastroenterology but authored the book ‘Treatise about the essence of ophthalmia, its types, causes and treatment’.

7. ‘Ammar Ibn ‘Ali Al-Mawsilī [Died 400 AH = 1010 AD]

Born and raised in Mawsil, north of Iraq, ‘Ammar Ibn ‘Ali and gained fame after he invented and used the hollow couching needle to extract soft cataract (congenital and/or traumatic); a major breakthrough in the management of cataracts throughout history of mankind. His main book is (The Chosen of the Eye Diseases and the Treatment).

Meyerhof translated the six different techniques ‘Ammar used to treat the contract surgically, demonstrating his skills in modifying the procedure based on the presenting case. ‘Ammar’s book attracted the attention of several scholars, and all the known manuscripts have been extensively reviewed by Hirshberg, Lippert, and Mittwoch (2).

‘Ammar was very sure of himself, and this is clear in the beginning of the book when he states, “for my ability and knowledge of this field surpasses everybody else’s”, and often he would finish this chapters is with, “... and I say...”, indicating that his stance was the most correct one. Wafai mentions numerous other examples where ‘Ammar appeared overconfident in his knowledge and experience, which caused some other authors to accuse him of arrogance. However, the author seems to have a generally positive outlook on ‘Ammar notably for his clinical skills, though addresses the major shortcoming of the book being the lack of illustrations, anatomical and surgical instruments, and that he did not explain the mechanism or causes of strabismus, nor the pathologies associated with vitreous or the retina.

8- ‘Ali Ibn ‘Isā Al-Kahhāl [Died 400 AH = 1010AD]

‘Ali Ibn ‘Isā spent his life in Baghdad, writing the first academically arranged book in the field of ophthalmology titled “Memorandum Book for Ophthalmologists”. This is known to be the oldest textbook of ophthalmology that has been entirely preserved in its original language. To European translators, he is known as ‘Jesu Hali’ and his book “Tractatus de Oculis”, which preserved the information in the lost works of ancient Grecian authors. ‘Ali Ibn ‘Isā emphasised meticulousness and caution in

the performance of surgery which was not present in the Grecian books.

What made this book unique and unsurpassable for over 800 years is the manner in which it was written, covering the anatomy of the eye, over 130 eye conditions from external eye diseases and their treatment, unapparent diseases of the eye such as pathologies of the visual mechanism, crystalline fluid, vitreous, optic nerve, day and night blindness, and abnormalities of the extra-ocular muscles. The final section of the book lists 143 simple medications alphabetically, along with their effect on the eye, and a further 80 prescriptions of compounded medication.

In 1936, the book was translated by Casey A. Wood, USA, the most recent edition being published in 1964 (7).

9. Ahmed Ibn ‘Abdul-Rahmān Ibn Mandawayh Al-Asfahānī [Died 410 AH = 1019 AD]

He wrote two main books:

- A. Treatise about the structure of the eye’s coats
- B. Treatise about the treatment of Mydriasis

Little is known about this author amongst historians except Usaybi’a who mentions the aforementioned two books on Ophthalmology. However, Samarrai wrote a more thorough biography of Al-Asfahānī, naming thirty three of his work in almost all aspects of medicine, which include the two books mentioned by Usaybi’a.

What is unique about Al-Asfahānī is that he is considered to be the first to write about paediatric ophthalmology in his book, “Treatise about the Illness in Children”, and therefore a founder of paediatric ophthalmology (3).

10. Ali Ibn Ibrāhīm Ibn Bukhtyashū’ Al-Kafartabī [Died 460 AH = 1067 AD]

Born and raised in Kafartab, a small town in northern Syria, Ali Ibn Ibrāhīm is a virtually unknown author or practicing physician. He was a descendant of a Christian family that produced many scholars throughout the ‘Abbāsīd Dynasty, beginning with Georges Ibn Bakhtyashū, who was hired by Caliph Al-Mansūr as his personal physician. He wrote a book with the title of (Anatomy of the eye, its shape and treatment of its diseases).

Ali Ibn Ibrāhīm’s father accepted Islam, as the name indicates, and this may have led to him being considered an outcast by his wealthy Christian family; the reason why historians know very little about him. The title of his book is “Anatomy of the eye, its shape and treatment of its diseases” (3, 8).

References

1. Julius Hirschberg. The History of Ophthalmology - Volume II, The Middle Ages. Germany: J. P. Wayenborgh Verlag; 1985.
2. Julius Hirschberg, J. Lippert and E. Mittwoch. The Arabian Ophthalmologists. Riyadh, Saudi Arabia: King Abdul Aziz City for Science and Technology (KACST); 1993.
3. Ibn Abi Usayb'ah. 'Uyūn Al-Anbā' Fī Tabaqat Al-Atibba'. Beirut, Lebanon: Al-Hayat; 1965.
4. Al-Sammarrā'i, M.D. Kamal. Abstract of the History of Arabian Medicine. Baghdad, Iraq: Dar Al-Nidal; 1985.
5. Ibn Sīnā, Abū 'Alī Al-Husayn Ibn 'Alī. Al-Qānūn Fī Al-Tib. Beirut, Lebanon: Dar Sader.
6. Hunayn Ibn Ishāq Al-'Abādī. Ten Treatises on the Eye. Cairo, Egypt: Al-Amiriyah Press; 1928.
7. 'Alī Ibn 'Isā Al-Kahhāl Al-Baghdādī. Memorandum Book of a 10th Century Oculist. Chicago, USA: North Western University Press; 1936.
8. Fuat Sezgin. The History of Arabic Literature, Volume III. Riyadh, Saudi Arabia: The King Saud University; 2009.

Career choices for Muslim women in the NHS: Hindered by Dress Code?

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Introduction

The Hijab and Bare Below the Elbows (HBBE) project was developed by a group of healthcare professionals with an interest in tackling workplace inequalities and discrimination. We felt there was a requirement to support female Muslims in the healthcare sector, as there was growing anecdotal accounts of dress code challenges within the workplace. In response, in April 2016, a questionnaire was developed to explore experiences of the NHS bare below the elbow (BBE) policy and experiences of wearing the hijab in theatres. The questionnaire was handed out to female attendees of a British Islamic Medical Association (BIMA) conference (Muslim Women Excelling in Islam and Medicine). The findings, published by the BMJ Open (1), revealed that more than half of Muslim women surveyed experienced problems with wearing a headscarf in theatre (51.5%), with some feeling embarrassed (23.4%), anxious (37.1%) and even bullied (36.5%). These experiences were shown to have a negative impact on their career choice. Consequently, women who were surveyed reported “avoided going to theatres” and deciding to give up their surgical dreams to follow careers in General Practice where they could wear “Islamic clothes with no concern”.

The dilemma

It is widely acknowledged that Muslims (both men and woman) must adhere to modest dress. For women this includes covering her body including the head and arms (2) [Quran 23:31]. However, in 2007 the NHS pursued a Bare Below the Elbows (BBE) policy, which has led many Muslim women to question whether adhering to the policy would compromise their religious beliefs. NHS guidelines necessitate BBE when in direct contact with patients however, there have been anecdotal accounts suggesting

Muslim women in the workplace are being reprimanded for covering their arms during non-patient facing activities i.e. when at computer desks.

The HBBE working group and the Muslim Council of Britain (MCB) have continued raised these issues with the Department of Health (DoH). The previous DoH guidance on this issue does make reference to equalities legislation on BBE policy relating to faith (3). However, a national audit conducted by BIMA found that only 9 out of 33 Trusts had managed implemented this guidance in their workplace policies (1). The audit also found that only 1 of 33 Trusts provided guidance for head coverings in theatres. Another problem Muslim women face is the use of hijabs in theatres. As there is no clear guidance in policies regarding hijabs in theatres there is huge discrepancy, not only between trusts but also amongst theatres within the same hospital. At a time where there is growing evidence explaining the disadvantage that Muslim women in the British labour market (4) and widening pay gaps from ethnic minority backgrounds (5), it is important, now more than ever, that inadvertent inequalities are exposed to prevent further discrimination.

Toolkit

In 2017, with the help of NHS Trust managers, infectious disease specialists and policy experts, HBBE working group, a toolkit was launched to aid health professionals facing work wear difficulties at work. As well as acknowledging the rights of other faith groups, the toolkit highlights individuals’ rights when it comes to wearing the hijab and/or practicing BBE at work. It also includes a user-friendly flowchart guiding readers on how to initiate often sensitive conversations with their local trusts as well as how to escalate any incidents that have occurred. The toolkit is available online and can be accessed through

the website of the British Islamic Medical Association (BIMA), here: <http://www.britishima.org/hbbe-toolkits/>

The research conducted by the HBBE group and the toolkits has drawn growing interest from BIMA, the MCB and the General Medical Council (GMC). To disseminate the work further, the research has been presented at the Infection prevention Society (IPS) conference. In November 2017, BIMA also presented these findings at a national roundtable initiated by the British Medical Association (BMA) and hosted by NHS Employers. The meeting included the following stakeholders; BMA, General Medical Council (GMC), NHS England, NHS Improvement, Equality and Human Rights Commission, IPS.

There is clearly much more that needs to be done. However, there has been recognition that this work is having an impact. The London Faith and Belief forum for inclusivity and innovation presented BIMA and University College London Hospital (UCLH) an award for their work in this area. Through discussions and careful consideration of changes in their policy, UCLH have aimed to achieve equality in the work environment whilst upholding the best level of patient care possible.

Next steps

A member of the HBBE team has been working closely with UCLH to help update their dress code policy. The new policy now details the allowance of full-length sleeves when not in direct clinical contact, $\frac{3}{4}$ length sleeves, and the use of disposable sleeves when in direct patient care. In addition to this, headscarves, kippots and turbans are allowed to be worn in the operating theatres providing they are washed daily at 60 and changed if soiled. Where available, orthopaedic hoods and single-use disposable head coverings are also permitted.

A year and a half later we are in discussions regarding the national policy. The HBBE team have many reports during this time from female medical professional deterred from taking a stand due to threats of escalation to GMC or dismissal. Some junior doctors feel so burdened by the hierarchy set in medicine that they are afraid to voice their concerns whilst others are bullied into nearing resignation.

Conclusion

It is clear that female Muslims employed by the NHS are facing extensive challenges with the BBE policy and wearing the headscarf in theatres; a mark of their faith. It is acknowledged that NHS leadership models centered on 'compassionate leadership' seek to encourage wider representation at senior levels as this could improve patient safety and better productivity (6). Questions need to be raised when policies hinder such steps.

The HBBE working group, BIMA and others have worked hard for several years to try to bring about greater awareness of the challenges faced by female Muslims in the NHS and we have reached out to many organisations at the top in an attempt to have more inclusive policies. We now call on each individual to create a change at a grassroot level. We urge you to look at and use the BIMA toolkits and our published findings to push for positive change in your local trusts. "Verily, Allah will not change the condition of people as long as they do not their state themselves.", Quran 13:11 (2).

References:

1. Malik A, Qureshi H, Abdul-Razakq H, et al. 'I decided not to go into surgery due to dress code': a cross-sectional study within the UK investigating experiences of female Muslim medical health professionals on bare below the elbows (BBE) policy and wearing headscarves (hijabs) in theatre *BMJ Open* 20.3.2019 . Access at : <https://bmjopen.bmj.com/content/bmjopen/9/3/e019954.full.pdf>
2. Haleem, M. A. S., translator. *The Qur'an: English Translation and Parallel Arabic Text*. Oxford UP, 2010.
3. DoH. Department of Health. *Uniforms and Workwear: An evidence base for developing local policy, 2007*. Available at: <http://www.dh.gov.uk/publications>
4. Khattab, N. and Hussein, S., 2018. Can religious affiliation explain the disadvantage of Muslim women in the British labour market?. *Work, Employment and Society*, 32(6), pp.1011-1028.

Sociodemographic correlation associated with health-related incompleteness of Ramadan fasts in Great Britain: a cross-sectional study

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Abstract

Ramadan fasting has recently resulted in fasts exceeding 19 hours in daily duration. This study examines the sociodemographic correlation of health-related incompleteness of Ramadan fasting, hypothesising that longer fasting times and more demanding lifestyles increased health-related incompleteness of Ramadan fasts.

A cross-sectional study of mature Muslims deemed religiously eligible to fast was conducted utilising an electronic self-completed questionnaire in Ramadan (July) in Great Britain in 2015. The main outcome measure was missing at least one fast due to self-reported health reasons, excluding menses, pregnancy, breastfeeding, or travel related incompleteness of fasts.

Analysis of 1,973 completed responses revealed that correlates: female sex (compared to males: AOR (an odd ratio) 1.71, 95% CI (confidence interval) 1.31-2.24), reduced religiosity (e.g. least religious compared to most religious: AOR 8.67, 95% CI 3.89-19.30), increased intensity of daily activity (most active compared to most sedentary: AOR 1.89, 95% CI 1.21-2.93), reduced length of fast (fasting <17 hours per day compared to >20 hours per day: AOR 2.76, 95% CI 1.29-5.87), having a comorbidity (AOR 3.73, 95% CI 2.45-5.67), and taking medication (AOR 4.92, 95% CI 2.50-9.69) were all significantly associated with missing at least one fast due to self-reported health reasons.

Fasting a longer fast (17-20 hours, or >20 hours) was not significantly associated with incompleteness of one fast due to health reasons. An increased intensity of daily activity proved to be significantly associated with incompleteness of one fast due to health reasons. Further validated research is crucial in developing this evidence base.

Introduction

In Islamic tradition, observant Muslims engage in fasting; entailing complete abstention from food, drink, and sexual activity from dawn to dusk during the month of Ramadan.(1) This is a religious injunction that applies to all post-pubescent, mentally capacious Muslims who do not qualify for a scripturally-mandated exemption. These exemptions include: menses and physical hardship brought on by travel or impaired physical capability due to age, acute or chronic illness, the need to take medication, and pregnancy and nursing. (1) In all cases there should be a reasonable fear of adverse consequence for the exemption to apply, which may relate to the onset, exacerbation, or delay in health recovery. This should be determined by a qualified health professional in cooperation with a qualified religious scholar. The premise of this exemption is the Quranic verse fragment: 'God wants ease for you, not hardship.' (2) The pre-dawn (suhur) and fast-opening (iftar) meals offer the Muslim times in the day to safely manage their health when fasting.

It is estimated there are 1.6 billion Muslims (23% of the world population) globally, and over 3 million reside in the United Kingdom (UK).(3, 4) The Muslim calendar is lunar and each solar year Ramadan moves forward by around 11 days. (5) In non-equatorial countries such as the UK, Ramadan will fall in the spring and summer months over the next decade, resulting in fasts that will last up to 21 hours in duration. In 2025 Ramadan will begin around March 1st. Recently, a question has been raised about whether the length of the fast in and of itself might result in a community-wide perception of unreasonable hardship on the part of those fasting; another possible religiously-mandated means of exemption from fasting.(6) Observing a summer Ramadan fast with the scripturally-mandated criteria (dawn-dusk) entails a long fast in high-latitude countries. This has led to the issuance of a recent legal opinion (fatwa) permitting artificial shortening of the fast to a maximum of 16 hours.(6)

Research currently shows that fasting is of little harm for the observer. Among Ramadan observers there has been no associated increase in incidence of cardiovascular disease, in the frequency and severity of common gastrointestinal symptoms (except constipation), and no significant impact identified upon mood, fatigue, and quality of life.(7-9) Fasting has been shown to significantly improve daytime sleepiness, fatigue, mood, and reduce low-density lipoprotein and fasting blood glucose levels. (9, 10) There are risks however, that fasters must be aware of specifically in diabetic patients; hypoglycaemia, hyperglycaemia, and dehydration.(1) Common problems such as headache, constipation, and lethargy, can be combatted by substantial fluid intake outside of the fasting time.(1) The majority of research currently conducted in this area however does not include

fasts that are more than 18 hours in length.

Methods

Design, sample, and setting

A cross-sectional study of Muslims in Great Britain was performed from the 1st to the 20th of July 2015 (14th of Ramadan to a few days after completion of Ramadan). An electronic anonymous self-completed questionnaire was piloted and amended before dissemination. The questionnaire was disseminated over email, social media (Facebook and Twitter), and WhatsApp's messaging service, using snowball sampling methods.

Questionnaire and measures

The questionnaire consisted of 11 items that gathered the following sociodemographic characteristics: age, sex, location in Ramadan, Muslim status (Muslim of less than three years or not), self-reported health, religiosity, occupational shift, intensity of daily activity, length of fast, medication taking, and co-morbidities.

Religiosity was determined by enquiring about a person's prayer status on a five-point Likert scale ranging from 'I rarely miss any of the five prayers or tahajjud (the night prayer)' to 'I usually pray once a week'. Occupational shift was sought by using a five-point Likert scales ranging from 'I work fixed hours during the day' to 'I work primarily nights'. Intensity of daily activity was derived from four options (light activity indoors, light activity outdoors, strenuous activity indoors and strenuous activity outdoors). Length of fast; <17 hours, 17-20 hours, or >20 hours in duration were chosen according to religious legal positions in the UK. The remaining seven characteristics were categorised as per Table 1.

The outcome measure of missing at least one fast due to health reasons (illness, need to take medication, concerns about pregnancy, worries about exams) was derived from four options (missed none, missed some, missed one, and missed all). This measure did not include menses or travel-related fast incompleteness.

Statistical analysis

We described the sample using frequency counts and percentages. In a bivariate analysis, we conducted chi squared analysis for differences in proportions to test the association between our outcome measure (missing at least one fast due to health reasons) and sociodemographic characteristics. A forced, multivariable logistic regression model adjusted for all independent variables then measured the association between our outcome measure and sociodemographic characteristics, with a particular focus on whether the length of fast was associated with missing at least one fast due to health reasons.

Due to low numbers, observations were removed if the respondent was not based in the UK during Ramadan (n=50) or if the respondent was pregnant or breastfeeding in Ramadan (n=14). The final sample therefore consisted of 1,973 responses.

All statistical analyses were conducted on Stata 12.0 (StataCorp).

Ethical statement

Ethical approval was not sought but ethical standards in accordance to the Declaration of Helsinki were maintained during the process of this study.

Results

Characteristics of sample

Table 1 presents the characteristics of the sample. Over half of respondents were aged 26-45 years (59.4%), were female (55.1%), and were located in South/Mid England or Wales during Ramadan (71.4%). The majority were not new to Islam (98.4%) and most were of good self-reported health (81.2%). Nearly 10% reported a comorbidity and 3% relayed taking medications.

In those fasting, self-reported beneficial weight loss was seen in 56.8% (n=1156), reduced stress in 66.6% (n=1356), increased happiness in 74.8% (n=1523), improved concentration in 40.9% (n=834), and increased performance at work in 33.8% (n=689) during Ramadan.

Bivariate analysis

Table 1 also presents the results of the bivariate analysis. Except for geographical location during Ramadan, all independent variables were significantly associated with missing at least one fast due to health reasons in Ramadan. This included increased age, female sex, being new to Islam, having poor health (in the form of poor self-reported health, having a comorbidity or taking medications), reduced religiosity, less variable occupational shift patterns, increased intensity of daily activity, and reduced length of fast.

Multivariate analysis

In our fully adjusted model (Table 2), six variables were independently associated with missing at least one fast due to health reasons: female sex (compared to males: AOR 1.71, 95% CI 1.31-2.24), reduced religiosity (e.g. least religious compared to most religious: AOR 8.67, 95% CI 3.89-19.30), increased intensity of daily activity (most active compared to most sedentary: AOR 1.89, 95% CI 1.21-2.93), reduced length of fast (fasting <17 hours per day compared to >20 hours per day: AOR 2.76, 95% CI 1.29-5.87), having a comorbidity (AOR 3.73, 95% CI 2.45-5.67), and taking medication (AOR 4.92, 95% CI 2.50-9.69).

Discussion

Summary and explanation of findings

This cross-sectional study of 1,973 Muslims in Great Britain showed the factors independently significantly associated with missing at least one fast due to self-reported health reasons were: less religiosity, greater intensity of activity, having a comorbidity, taking medication, being female, and counter-intuitively choosing a shorter fasting period (<17 hours). We know that Muslims who could be exempt from fasting, still insist on fasting. (11) Muslims hold fasting to be an important aspect of their life. Upholding fasting in Ramadan benefits one's overall health and so missing fasts due to health reasons for some, could impact one's physical, emotional, psychological, and spiritual state. (11, 12)

When excluding women who were pregnant, breastfeeding, and on menses, being female was associated with missing at least one fast due to health reasons. There is difficulty in explaining this due to the lack of literature on this association, highlighting a need for future research to explore this further. Practical steps to consider have been suggested when counselling women who intend to fast in Ramadan. (13)

Faith and God-consciousness (Taqwa) are foundations of Islam and subsequently influence one's actions. The Ramadan fast is generally a challenge for those observing, endeavouring to balance work and home life, whilst also wanting to please God by adhering to this tenet of faith (observing Ramadan is a pillar of Islam). An explanation of the association between reduced religiosity and missing a fast due to health reasons could be grounded in an assumption that less practising (numbers of prayers performed daily) Muslims are more likely to end a fast due to health complaints such as headache or tiredness, whereas more practising Muslims may persist with similar health complaints, finding ways to manage the day's fast with deep resolve to complete the fast. This is limited by the difficulty that patients are not be able to distinguish between a serious and a non-serious complaint when fasting.

It has been found that the physical activity of fasters reduces in Ramadan as they attempt to conserve energy and excel in religious practices. (14, 15) Energy balance is well maintained and body fluid is better maintained in those active against those sedentary during Ramadan. (16) The length of fasting in 2015 and being very physically active could explain why physically active fasters are nearly twice likely to miss one fast due to health reasons than those who were sedentary. Physically demanding occupational roles may also impact on non-completion of fasts. Patients with co-morbidities may fast; cancer, acid-reflux, chronic liver disease, and diabetes, and symptoms

of these illnesses can increase when fasting. (11, 17-19)

Dependant on the symptom severity experienced by the observer, they may choose to annul or miss fasts to control their symptoms. Those taking medication were nearly 5 times more likely to miss a fast due to health reasons than those not. Patients may need to take daily medication for conditions such as asthma, epilepsy, and mental illness, which may interfere with their ability to safely fast. (20) The dosage timings can be altered to support the fasting person, however, there may be situations where this would increase the risk of harm to the patient or not be possible due to the pharmacodynamics of the medication resulting in the person being unable to fast. (20) Medication could also have been used where fasting symptoms such as headache or dyspepsia occur and thus annul the fast.

Fasting a longer fast (17-20 hours or >20 hours) was not associated with incompleteness of fasts due to health reasons. Fasting a shorter fast (<17 hours compared to >20 hours) however resulted in nearly 3 times more likelihood of incompleteness of a fast due to health reasons. This may be elucidated by the choosing of a (non-mainstream) shorter fast as this is perceived to be less physically demanding, going away from community practice and mosque timetables, and thus less likely to complete the shorter fast because their threshold for perception of hardship is lower. (21) Alternatively, more unwell patients may have chosen this shorter fast and thus are more likely to break it due to health reasons. Only a small minority of observers chose this type of fast.

Strengths and limitations

This is the first study to our knowledge examining sociodemographic correlates for incompleteness of fasts due to health reasons in Ramadan. A strength lies in the large number of responses which gave us the ability to perform sub-group analyses and potentially generalise our findings to Great Britain. Although not validated, our questionnaire was piloted through fifteen students of Islam which helped improve its content validity and reliability. The outcome measure of incompleteness of a fast due to health reasons was not exclusively limited to ill health, but also may have included 'worries about exams' (for younger fasters), 'the need to take medication' and 'concerns about pregnancy'. These are not specific health outcomes but could serve as proxy health measures.

Implications for practice and research

These results are important for clinicians as they provide healthcare professionals with possible factors that may result in incompleteness of fasts due to self-reported health reasons for patients. It thus enables clinicians to provide advice and assist patients in formulating acceptable and negotiated health-plans where patients can maximise their ability to fast safely during the month of Ramadan. It can

also promote and strengthen self-management of fasting for the patient which in turn heightens patient confidence and enables patients to undertake Ramadan fasting.

We recommend that patients with co-morbidities and on regular medication see their General Practitioner/family medicine doctor prior to Ramadan to discuss whether they can fast safely and to establish a safe medication regime. (1, 20, 22) We also encourage clinicians to advise patients in intense manual labour to liaise with their employer to negotiate realistic occupational changes during Ramadan to help facilitate fasting. Guidelines tailored for general practice would benefit primary care considering 90% of patient consultations occur in general practice.(23)

This is the first study to examine what factors influence the incompleteness of fasts in Ramadan. There is an urgent need for validated research to further examine and understand what factors influence the incompleteness of fasts and how the length of the fast may affect fasting, specifically the incompleteness of fasts in those who adopt a shorter fast. It is also important to incorporate validated spiritual scales in future Ramadan research. (24)

Conclusion

In conclusion, we found that fasting a longer fast (17-20 hours or >20 hours) was not significantly associated with incompleteness of one's fast due to health reasons. Those who fasted an unorthodox and chosen less than 17 hour fast were more likely to incomplete a fast for health reasons. Those fasters who are female (excluded on menses, travelling, pregnant and nursing), less religious, with greater physical daily activity, have co-morbidities, and take medication were all significantly associated with the incompleteness of at least one fast due to self-reported health reasons. Future validated research is crucial in developing this important evidence base.

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References

1. Mughal F. Ramadan: what it means for general practice. *Br J Gen Pract.* 2014;64(624):356.
2. Abdel Haleem MAS. *The Qur'an*, chapter 2 verse 185., Oxford University Press,2004.

3. Pew Research Center's Religion and Public Life. The Global Religious Landscape, 2012 [Available from: <http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/>].
4. The Telegraph. Number of UK Muslims exceeds three million for first time, 2016 [Available from: <http://www.telegraph.co.uk/news/uknews/12132641/Number-of-UK-Muslims-exceeds-three-million-for-first-time.html>].
5. Ali S, Davies MJ, Brady EM, et al. Guidelines for managing diabetes in Ramadan. *Diabet Med*. 2016;33(10):1315-29.
6. Yusuf A. *Shedding Light on the Dawn*, page 162-165.; Nur al-Habib; 2017.
7. Turin TC, Ahmed S, Shommu NS, et al. Ramadan fasting is not usually associated with the risk of cardiovascular events: A systematic review and meta-analysis. *J Family Community Med*. 2016;23(2):73-81.
8. Keshteli AH, Sadeghpour S, Feizi A, et al. Evaluation of Self-Perceived Changes in Gastrointestinal Symptoms During Ramadan Fasting. *J Relig Health*. 2015.
9. Nugraha B, Ghashang SK, Hamdan I, et al. Effect of Ramadan fasting on fatigue, mood, sleepiness, and health-related quality of life of healthy young men in summer time in Germany: A prospective controlled study. *Appetite*. 2016.
10. Kul S, Savas E, Ozturk ZA, et al. Does Ramadan fasting alter body weight and blood lipids and fasting blood glucose in a healthy population? A meta-analysis. *J Relig Health*. 2014;53(3):929-42.
11. Patel NR, Kennedy A, Blickem C, et al. Having diabetes and having to fast: a qualitative study of British Muslims with diabetes. *Health Expect*. 2015;18(5):1698-708.
12. Pathy R, Mills KE, Gazeley S, et al. Health is a spiritual thing: perspectives of health care professionals and female Somali and Bangladeshi women on the health impacts of fasting during Ramadan. *Ethnicity & Health*. 2011;16(1):43-56.
13. Bajaj S, Khan A, Fathima FN, et al. South Asian consensus statement on women's health and Ramadan. *Indian J Endocrinol Metab*. 2012;16(4):508-11.
14. Afifi ZE. Daily practices, study performance and health during the Ramadan fast. *J R Soc Health*. 1997;117(4):231-5.
15. Soh KG, Yusof A, Abdullah NSM, et al. Comparing physical activity of Malaysian Malay men and women before, during, and after Ramadan. *Pertanika Journal of Social Sciences & Humanities*. 2013;21(2):569-78.
16. Ramadan J, Telahoun G, Al-Zaid NS, et al. Responses to exercise, fluid, and energy balances during Ramadan in sedentary and active males. *Nutrition*. 1999;15(10):735-9.
17. Zeeneldin AA, Taha FM. Fasting among Muslim cancer patients during the holy month of Ramadan. *Ann Saudi Med*. 2012;32(3):243-9.
18. Hamdan AL, Nassar J, Dowli A, et al. Effect of fasting on laryngopharyngeal reflux disease in male subjects. *Eur Arch Otorhinolaryngol*. 2012;269(11):2361-6.
19. Elnadry MH, Nigm IA, Abdel Aziz IM, et al. Effect of Ramadan fasting on Muslim patients with chronic liver diseases. *J Egypt Soc Parasitol*. 2011;41(2):337-46.
20. Aadil N, Houti IE, Moussamih S. Drug intake during Ramadan. *BMJ*. 2004;329(7469):778-82.
21. Hopkins S. Ramadan 2015 Fasting UK Hours Should Be Shortened, Muslim Academic Usama Hasan Argues, 2015 [Available from: http://www.huffingtonpost.co.uk/2015/06/15/ramadan-hours-shortened_u_n_7584596.html].
22. McEwen LN, Ibrahim M, Ali NM, et al. Impact of an individualized type 2 diabetes education program on clinical outcomes during Ramadan. *BMJ Open Diabetes Res Care*. 2015;3(1):e000111.
23. Roland M, Everington S. Tackling the crisis in general practice. *BMJ*. 2016;352.
24. Jawad F, Kalra S. Ramadan and diabetes: Holistic trial design. *J Pak Med Assoc*. 2016;66(7):791-2.

Table 1: Percentage of missed fasts due to self-reported poor health in Ramadan, by sociodemographic characteristics, % (n)

Characteristics		Full sample	Missed at least one fast
Age (years)	14-25	29.1 (575)	19.8 (114)
	26-45	59.4 (1171)	18.4 (215)
	46-65	10.9 (215)	24.2 (52)
	>65	0.6 (12)	50.0 (6)
Sex	Male	44.9 (886)	14.7 (130)
	Female	55.1 (1087)	23.6 (257)
Location during Ramadan	South/Mid England or Wales	71.4 (1409)	19.5 (274)
	Northern England/Scotland	28.6 (564)	20.0 (564)
New Muslim	No	98.4 (1941)	19.4 (376)
	Yes	1.6 (32)	34.4 (11)
Self-reported health	Good health	81.2 (1601)	16.8 (268)
	Some health problems	17.3 (341)	29.9 (102)
	Significant health problems	1.6 (31)	54.8 (17)
Religiosity	0 (most religious)	4.6 (90)	12.2 (11)
	1	43.1 (851)	12.0 (102)
	2	31.1 (613)	18.4 (113)
	3	9.6 (189)	31.2 (59)
	4	5.3 (105)	41.0 (43)
	5 (least religious)	6.3 (125)	52.8 (66)
Occupational shift	0 (least stable)	27.2 (537)	23.1 (124)
	1	10.8 (212)	24.5 (52)
	2	54.1 (1067)	16.9 (180)
	3	1.8 (36)	19.4 (7)
	4 (most stable)	6.1 (121)	19.8 (24)
Intensity of daily activity	0	48.8 (961)	18.1 (174)
	1	30.9 (609)	18.2 (111)
	2	12.9 (254)	23.2 (59)
	3	7.5 (147)	28.6 (42)
Length of fast	>20 hours	15.7 (309)	17.8 (55)
	17-20 hours	82.1 (1619)	19.3 (312)
	<17 hours	2.3 (45)	44.4 (20)
Comorbidity	No	90.9 (1793)	16.4 (294)
	Yes	9.1 (180)	51.7 (93)
Taking medication	No	96.9 (1911)	17.8 (343)
	Yes	3.1 (62)	71.0 (44)

Bold: p<0.05 for chi squared difference in proportions

Table 2: Correlates missed fasts due to self-reported poor health

Characteristics		Full sample	AOR (95% CI)
Age (years)	14-25	29.1 (575)	1.00
	26-45	59.4 (1171)	1.13 (0.82, 1.55)
	46-65	10.9 (215)	1.46 (0.92, 2.31)
	>65	0.6 (12)	2.63 (0.55, 12.58)
Sex	Male	44.9 (886)	1.00
	Female	55.1 (1087)	1.71 (1.31, 2.24)***
Location during Ramadan	South/Mid England or Wales	71.4 (1409)	1.00
	Northern England/Scotland	28.6 (564)	0.96 (0.73, 1.27)
New Muslim	No	98.4 (1941)	1.00
	Yes	1.6 (32)	1.25 (0.51, 3.03)
Self-reported health	Good health	81.2 (1601)	1.00
	Some health problems	17.3 (341)	0.97 (0.68, 1.37)
	Significant health problems	1.6 (31)	1.39 (0.55, 3.52)
Religiosity	0 (most religious)	4.6 (90)	1.00
	1	43.1 (851)	1.29 (0.62, 2.68)
	2	31.1 (613)	2.23 (1.07, 4.66)*
	3	9.6 (189)	4.73 (2.16, 10.29)***
	4	5.3 (105)	7.43 (3.24, 17.05)***
	5 (least religious)	6.3 (125)	8.67 (3.89, 19.30)***
Occupational shift	0 (least stable)	27.2 (537)	1.00
	1	10.8 (212)	1.34 (0.84, 2.12)
	2	54.1 (1067)	0.76 (0.57, 1.03)
	3	1.8 (36)	0.38 (0.13, 1.11)
	4 (most stable)	6.1 (121)	0.72 (0.41, 1.27)
Intensity of daily activity	0	48.8 (961)	1.00
	1	30.9 (609)	0.92 (0.69, 1.24)
	2	12.9 (254)	1.13 (0.78, 1.65)
	3	7.5 (147)	1.89 (1.21, 2.93)**
Length of fast	>20 hours	15.7 (309)	1.00
	17-20 hours	82.1 (1619)	1.06 (0.74, 1.51)
	<17 hours	2.3 (45)	2.76 (1.29, 5.87)**
Comorbidity	No	90.9 (1793)	1.00
	Yes	9.1 (180)	3.73 (2.45, 5.67)***
Taking medication	No	96.9 (1911)	1.00
	Yes	3.1 (62)	4.92 (2.50, 9.69)***

Note: *p<0.05; **p<0.01; ***p<0.001; Model adjusted for all variables in the Table

Personal Reflections on Humanitarian Medical Aid and Professional Development

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Abstract

Global events such as humanitarian disasters and crises or developmental programmes in resource constrained settings represent opportunities for well-meaning international medical volunteerism. However, imperative to these efforts is the appropriate contextual knowledge, understanding, training and development of medical specialists who seek to participate in such efforts. Three first-hand narratives are summarised with reflections on the potential harm of humanitarian response, the importance of personal and professional development as a medical volunteer, in addition to the reciprocal gains to institutions and systems involved in hosting and implementing programmes.

Introduction

Sometimes, even when you think you're prepared, you can still be shocked. As I got out of the minivan on the east coast of Sri Lanka just before sunrise following the South Asian Tsunami of 2004, the devastation where the waves had hit was complete. Stretching inland hundreds of metres, debris, damaged vessels, carcasses of cattle and empty ruined shells of buildings littered the coastline in both directions as far as my eyes could scan. The waves, now rolling onto the beach under dark billowing clouds still looked menacing, a reminder of the death and destruction just recently meted out onto communities who had never heard of the word 'Tsunami' until a few days prior.

Coordination in humanitarian emergencies

UI was joining the initial assessment team who had set up a clinic service within a school housing displaced families. My role was to consider how best to expand our relief operations, as well as plan for the arrival of further volunteer teams. However, it was clear when attending the local coordination meetings that there were a significant number of international Non-Government Organizations (NGOs) with varying capacities, approaches and historical presence that were also scaling up their responses, expressing their challenges and seeking 'territorial' ownership for the responsibility of supporting displaced communities (1). What was surprising was the absence

of any significant government health representation at these meetings. In the coming days, our team quickly realised and verified, that despite the immense loss of life and destruction to infrastructure, the local Ministry of Health had re-established provision of services through community halls and other public facilities (2). Many of their staff, having dealt with funeral arrangements for loved ones, were now returning to serve those in need. What they lacked were the physical structures from which to coordinate and deliver their work, particularly given that there was now competition for real estate, in addition to requirements for furnishings and equipment given that some many public and private properties had been destroyed. Additionally, the significant psychological impact on communities could not be underestimated (3).

We pivoted our plan. We stopped recruitment and deployment of volunteer emergency medical teams, negotiated the rent for 3 months for an office space to be used by local government health administrators, initiated and completed the construction of a new primary health care facility in coordination with regional development plans, as well as organised a national psychological trauma workshop for local health workers. Collaboration and consultation with the Ministry of Health as well as involvement of local partners guided our success.

Interestingly, this nature of collaboration is now embedded in humanitarian practice as part of the 'cluster'

approach which brings together multiple stakeholders to coordinate the response based on need as well as sector expertise (e.g.: water and sanitation, health, shelter, food security etc) and it is imperative that agencies that respond to disasters register with the local cluster system (4).

Knowledge, skills and attributes of the humanitarian medical volunteer

Many healthcare workers are spurred into action by witnessing the impact of disasters on communities, driven by faith, altruism and a desire to make a difference (5). However, it is important to recognise that the discipline of Humanitarian Medicine and Disaster Management also requires an understanding of key concepts and attainment of skills (6). While we may be trained and skilled as clinicians in our ability to respond locally to a mass casualty incident within an established and development hospital/healthcare system where we have defined roles and responsibilities, a disaster management approach emphasises an appropriate needs assessment involving stakeholders, planning and setting project goals and objectives while incorporating monitoring and evaluation indicators, as well as being accountable and learning from practice. Information and personnel management are critical. We are not often exposed to such environments of comprehensive response in our day to day practice, and while a professional discipline in its own right, it is clear disaster management develops a transferable skill set and dynamism that is a would support the systems in which we normally work.

Emergency Medical Teams in disaster response

These skills were again put to use while responding to the earthquake which struck Haiti in 2010, where I joined an American team. Here we had the good fortune of working in partnership with a local Haitian civil society organisation that had mobilised their volunteers, as well as tapped into their US networks for support and funding, in addition to being able to provide us with food and shelter. It is surprising to observe how often these most basic of needs are a neglected oversight by short term humanitarian response workers, and reiterates the need on emergency medical teams to ensure pre-deployment preparation, developing mental and physical resilience, as well as considering personal health and safety (7,8). Needless to say, I was grateful for the evening meal of beans and rice, and even more grateful for the open yard in which I was sleeping when the aftershocks hit.

We had set up a field clinic inside an abandoned amusement park compound, which gave us the added security of high walls, as well as single entry and exit points. During one of our afternoons of service, two bus-loads of American medical volunteers rolled up, comprising of nurses,

doctors and a team of surgeons, representative of the massive response and good will from the US. However, as the teams visited regional hospitals to offer their services, they returned back to the field site frustrated in recognition that the hospitals were overwhelmed, with patients, staff and volunteers, with no surgical theatre or ward capacity from which they could contribute. There were scores of post-operative injured patients lining the hospital walkways with soaked dressings that had not been changed for days. The benefit of communication, coordination and integration with the WHO-hosted health cluster came into its own. Not only were we able to advocate for the needs of our local Haitian partner (who were not permitted access to the meetings by security staff), but we were able to rapidly develop a plan and secure resources to set up a post-operative surgical review and revision service. Patients languishing at hospital sites could be transferred to our field site, have their wounds debrided and managed, as well as remain sheltered post-operatively in the 8-bed tented facility we had set up. However, one of the critical learning points was that of the need for international teams to have the right skill mix, training and resources in order to deploy and offer an impactful response. Such issues are emphasised in the WHO guidance on Emergency Medical Teams which has been developed following the Haitian experience (9).

Emergency Medical Teams in disaster response

These skills were again put to use while responding to the earthquake which struck Haiti in 2010, where I joined an American team. Here we had the good fortune of working in partnership with a local Haitian civil society organisation that had mobilised their volunteers, as well as tapped into their US networks for support and funding,

In addition to being able to provide us with food and shelter. It is surprising to observe how often these most basic of needs are a neglected oversight by short term humanitarian response workers, and reiterates the need on emergency medical teams to ensure pre-deployment preparation, developing mental and physical resilience, as well as considering personal health and safety (7,8). Needless to say, I was grateful for the evening meal of beans and rice, and even more grateful for the open yard in which I was sleeping when the aftershocks hit.

We had set up a field clinic inside an abandoned amusement park compound, which gave us the added security of high walls, as well as single entry and exit points. During one of our afternoons of service, two bus-loads of American medical volunteers rolled up, comprising of nurses, doctors and a team of surgeons, representative of the massive response and good will from the US. However, as the teams visited regional hospitals to offer their services, they returned back to the

field site frustrated in recognition that the hospitals were overwhelmed, with patients, staff and volunteers, with no surgical theatre or ward capacity from which they could contribute. There were scores of post-operative injured patients lining the hospital walkways with soaked dressings that had not been changed for days. The benefit of communication, coordination and integration with the WHO-hosted health cluster came into its own. Not only were we able to advocate for the needs of our local Haitian partner (who were not permitted access to the meetings by security staff), but we were able to rapidly develop a plan and secure resources to set up a post-operative surgical review and revision service. Patients languishing at hospital sites could be transferred to our field site, have their wounds debrided and managed, as well as remain sheltered post operatively in the 8-bed tented facility we had set up. However, one of the critical learning points was that of the need for international teams to have the right skill mix, training and resources in order to deploy and offer an impactful response. Such issues are emphasised in the WHO guidance on Emergency Medical Teams which has been developed following the Haitian experience (9).

Leadership skills and professional development

Although utilising technical expertise as an emergency physician to see and treat patients, I found myself drawing upon and developing non-technical skill sets to inspire a shared purpose and vision, while engaging and developing our team's capability, and ensuring our service was connected to the wider network of field hospitals and clinics, all essential behavioural facets of the NHS healthcare leadership model (10). I believe that my experiences as a medical volunteer with the charity Doctors Worldwide on other international projects helped to further nurture this attitude and approach.

While participation in disaster response and relief accelerates and reinforces growth in a range of leadership, inter-personal and cross-cultural skills, these can often be more sustainably advanced through involvement in longer-term health development programs in low and middle-income countries, or where healthcare systems are still at an early stage of maturity (11).

An example of this was during my time as a member of faculty during the inaugural year of the emergency medicine residency/specialty training program launched through the pioneering US-funded Human Resources for Health Program, Rwanda (12). While a key focus of the role was to deliver didactic content as well as supervise trainees on the shop floor, it was also imperative to build upon opportunities to develop the emergency department system and improve safety in a challenging and resource constrained environment. It is often said that to teach is to learn. Working alongside nursing and physician

colleagues who had been working at Kigali University Teaching Hospital for years was often a humbling experience given the patience, resilience and tolerance displayed. This often called for us to be innovative in our instruction, collaborative in our approach to improve patient outcomes, and humble in engaging our colleagues for change. In this setting where major trauma represents a significant clinical burden, I recall the case of a young man injured by a collapsing wall who was brought in unresponsive with profound haemorrhagic shock from a suspected grade V splenic injury (13). As the nursing staff peeled away predicting futility, it happened that this patient arrived at our handover during shift change, and we hence had 4 trainees and 2 consultants present. We resuscitated aggressively, managed to get blood transfusions started early, pushed for theatre, and a few hours later heard the news from post-op recovery that the young man had survived. This 'win' elevated the mood and ambition of staff for weeks, acknowledging what could be achieved should systems and performance be strengthened. Similarly, the emotive and tragic death of a paediatric burns patient provided us the right opportunity to launch mortality and morbidity meetings, and involve staff in guideline development. In order to balance our demands and expectations as expatriate clinicians, we organised a day trip to a lakeside resort for staff who had never before been afforded such an opportunity to get together as a team. The photos still adorn the Sister's desk in the emergency dept office.

Conclusion

Global Health and Humanitarian Medicine are evolving disciplines and concepts which encompass a range of skills, many of which are aligned with existing specialty curricular components, such as time and workload management, ethical research, teaching and training, health promotion and public health to name but a few. While it has been recognized that staff who have worked overseas bring back valuable skills to their place of employment, there has been limited formalized development of such experience in the UK, which has often been voluntary, and not always structured or supervised (14). Clearly, we have an opportunity and need to develop a cadre of global health practitioners and specialists to help tackle the clinical and leadership challenges of both national and international contexts, in addition to nurturing the spirit of altruism with which many of us began our journey in medicine.

References

1. Bennett, J, W Bertrand, C Harkin, S Samarasinghe and H Wickramatillake. Coordination of international humanitarian assistance in tsunami-affected countries. London: Tsunami Evaluation Coalition. 2006

2. Yamada S, Gunatilake RP, Roytman TM, Gunatilake S, Fernando T, Fernando L. The Sri Lanka tsunami experience. *Disaster Manag Response*. 2006 Apr-Jun;4(2):38-48
3. John Mahoney, Vijay Chandra, Harrischandra Gambheera, Terrence De Silva & T. Suveendran. Responding to the mental health and psychosocial needs of the people of Sri Lanka in disasters. *International Review of Psychiatry*. 2006, 18:6, 593-597
4. What is the Cluster Approach? Available from: <https://www.humanitarianresponse.info/en/about-clusters/what-is-the-cluster-approach>. [Accessed 03/08/2019].
5. Bauer I. More harm than good? The questionable ethics of medical volunteering and international student placements. *Tropical Diseases, Travel Medicine and Vaccines*. 2017, 3:5
6. Ripoll A, Djalali A, Foletti M, Ragazonni L, Della Corte F, Lupescu O, Ingrassia P et al. Core Competencies in Disaster Management and Humanitarian Assistance: A Systematic Review. *Disaster Medicine and Public Health Preparedness*. 2015 9(4), 430-439
7. Merchant RM, Leigh JE, Lurie N, Health Care Volunteers and Disaster Response — First, Be Prepared. *N Engl J Med* 2010; 362:872-873
8. Archer N, Moschovis PP, Le PV, Farmer P. Perspective: Postearthquake Haiti Renews the Call for Global Health Training in Medical Education. *Academic Medicine*. July 2011, 86(7):889-891.
9. World Health Organization. Global Health Cluster. Classification and Minimum Standards for Foreign Medical Teams in Sudden Onset Disasters. Available from: a. http://www.who.int/hac/global_health_cluster/fmt_guidelines_september2013.pdf. [Accessed 03/08/19]
10. NHS Leadership Academy. Healthcare Leadership Model. Available from: <https://www.leadershipacademy.nhs.uk/resources/healthcare-leadership-model/> [Accessed 03/08/19]
11. Yeomans D, Le G, Pandit H, et al. Is overseas volunteering beneficial to the NHS? The analysis of volunteers' responses to a feedback questionnaire following experiences in low-income and middle-income countries. *BMJ Open* 2017;7:e017517
12. Cancedda C, Cotton P, Shema J, et al. Health Professional Training and Capacity Strengthening Through International Academic Partnerships: The First Five Years of the Human Resources for Health Program in Rwanda. *Int J Health Policy Manag*. 2018;7(11):1024–1039.
13. Mbanjumucyo G, George N, Kearney A, et al. Epidemiology of injuries and outcomes among trauma patients receiving prehospital care at a tertiary teaching hospital in Kigali, Rwanda. *Afr J Emerg Med*. 2016;6(4):191–197
14. Jones FA, Knights DP, Sinclair VF, Baraitser P. Do health partnerships with organisations in lower income countries benefit the UK partner? A review of the literature. *Global Health*. 2013;9:38.

Three British Muftis Understanding of Organ Transplantation

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Abstract

Modern technology has given rise to a host of legal and theological questions for Muslims. One such question that engaged Muslim scholars since the 1950s was the issue of organ donation. It brought into question and conflict a number of ethical teachings such as the value of saving life as opposed to the dignity and honour that should be afforded to the dead. The article is based on a small pilot-study comprising themes from interviews with three UK muftis. The resulting conclusion of the article will form the evidence-base for further research into understanding perception of organ transplantation and authority among UK Muslim religious professionals (imams, ulama and chaplains).

Introduction

Modern technology has given rise to a host of legal and theological questions for Muslims (1). One such question that engaged scholars in the Muslim world since 1950s was the issue of organ transplantation (2). It brought into question and conflict a number of ethical teachings such as the value of saving life as opposed to the dignity and honour that should be afforded to the dead. It pitched God's sovereignty against human autonomy over their bodies. The life-saving and death-ridding technology gave rise to debates related to exploitation of the weak and the utilitarian use of the human body as means to an end and not an end in itself.

Scope of the Research

From the outset, it should be mentioned that all discussions on organ transplantation in this article refer to allotransplant i.e. receiving from and donating to another human being. Autotransplant and xenotransplant are not the focus of this article as they do not pose much of an ethical problem unlike allotransplant. Furthermore, the discussion on allotransplant in the case of a living donor is only confined to the donation of non-vital organs as there is a consensus on the impermissibility of donating vital organs (3, 4). Additionally, the article also excludes discussion on the transplantation of the male and female reproductive glands for both living and cadaver donor as the impermissibility of this is also agreed upon (5),

although some British legal scholars are making a plea for Muslim scholars to rethink this position in the case of uterus transplant (6). The article is structured such that I combine ethico-legal discussions on organ donation with data from a small qualitative pilot-study. The resulting conclusion of the article will form the evidence-base for further research into understanding perception of organ transplantation and authority among UK Muslim religious professionals (imams, ulama and chaplains). Studies have shown that the ulama are the first port of call for members of the Muslim community for bioethics related issues (7, 8), and any form of intervention in the Muslim community would need to start by educating the ulama. This study marries the abstract (ethico-legal) with practical paradigm (qualitative research) in order to give epistemic weight to the daily life practices of Muslims in the production of knowledge (9). Thus, I take a two-pronged approach. Firstly, a small survey of organ donation fatwas issued, and conferences held in the Muslim world are discussed. This is followed by some discussions on fatwas issued in a British context. The survey is not exhaustive and fuller discussions can be found in Ghaly (8), Albar (5), Abu Zayd (10) and Yaqubi (11). For the purpose of this small study, I have confined myself to looking at material from Sunni Islamic sources. There is a rich plethora of discussion among Shia theologians, which does not constitute the subject of this study. I then supplement this with a small set of qualitative data.

The qualitative data collection is based on a small pilot-study comprising of open-ended interviews with three muftis experienced in bioethical issues conducted during the summer of 2016. A qualitative data analysis program called Nvivo was used to thematically arrange, code and analyze the data. The interview participants were chosen based on their training and their knowledge of Islamic law and theology. The research was approved by the author's departmental ethics committee and full written consent was sought from the interviewees prior to the interview. For the purpose of this article, only three themes are discussed from the coding frame.

The findings of this research confirms Rasheed and Padela's (7) study that if meaningful health behaviour change intervention on the benefit of organ donation through partnering with Muslim scholars is to be successful, there needs to be a paradigm shift in how Muslim scholars discuss the topic of organ donation.

Organ Transplantation Fatwas in the Muslim World

Organ transplantation is a relatively new phenomenon. The modern era of transplantation started in the 1940s with an increased medical interest in cornea grafts (12). The successful transplantation of a kidney in 1954 opened up new life-saving horizons hitherto deemed impossible. These technological advances caught on very quickly in the Muslim world. The first successful renal transplantation took place in Jordan in 1972 (13). Egypt is seen as the 'pioneering' Muslim country in transplant medicine (14). Egyptians pride themselves as the first Muslim doctors to have direct interaction with cornea grafts as early as the 1960s (Ibid., p. 2). A fatwa preserved from 1959 is evidence of this. A charitable organization for the blind called the 'Light and Hope Foundation' sought a religious verdict on founding an eye bank in Egypt. The then Grand Mufti of Egypt, Shaykh Hasan Ma'mun responded to their query by extolling the virtues of such an initiative (2, 14). In issuing the fatwa, Ma'mun treads with care. He is careful not to offend people's sensitivity towards honouring the dead whilst skilfully enumerating the religious and practical needs for an eye bank.

Several high-profile conferences took place from the 1970s onward on the issue of organ donation. A corollary of these international conferences was the birth of a new mode of arriving at religious verdicts known as *ijtihad jama'i* (collective *ijtihad*) (15-17). A question posed to the Islamic Fiqh Academy - founded in 1977 and an affiliate of the Muslim World League, Mecca, Saudi Arabia - from its USA office, resulted in a nine-day conference in January 1985 in its 8th session held in Mecca. It was concluded that the evidence for the permissibility of organ donation was more convincing. The proceedings of the conference were published in the first issue of its

journal *Majallat Al-Majma'at al-Fiqhi al-Islami* (3). It declared that live donation is permissible because there is known benefit in it (*maslaha*), it does not breach the dignity of the human body (*ihana*) and it is considered a praiseworthy act. However, the declaration also points out that the following conditions must be abided by: (1) The donor should not be harmed, (2) The donation must be taken with consent, (3) It should be the only medical treatment available to save the recipient and (4) There must be a high probability of success rate for both procuring the organ and transplanting it. It also declared that taking an organ from a cadaver donor is a *fortiori* permissible as long as: (a) the deceased was legally competent when alive; and (b) proper consent was given (3). This high-profile conference became the basis of many subsequent conferences and fatwas like the fatwa issued by the European Council for Fatwa and Research in 2000 discussed below (18).

It will be disingenuous of me to paint a picture that Muslim scholars worldwide were unanimous on the permissibility of organ donation. This is not the case. Many scholars have opposed organ donation for a variety of reasons. However, they are on the whole, a diminishing minority. Famous of them all was the celebrated Egyptian 'Shaykh of the People', Muhammad Mitwalli al-Sha'rawi (d. 1998) who led a huge campaign against organ harvesting in Egypt (19). Sha'rawi's argument was brilliant in its simplicity. It resonated with the sentiments of the lay public. Our bodies do not belong to us; it is a trust endowed to us from God. Organ donation trespasses the acceptable boundaries of ethical mores; he argued. It is sacrilegious and a violation of this trust (14, 19). The language of Sha'rawi's appeal was not rigid and elitist like his fellow colleagues in Egypt. His was an argument which simply wanted the poor religious people of Egypt to connect with God and have faith in Him in the face of misery, poverty and illness. For the Egyptian public, Sha'rawi's fiery brimstone preaching confirmed their anxiety and suspicion regarding the efficacy of organ transplantation. Farmers in Egypt already faced the repercussion of consuming crops treated with pesticide by government contractors in the form of mass renal failure. Furthermore, stories of children kidnapped from orphanages to service organ tourists, and missing eyeballs of dead relatives preserved in state hospitals left a very bitter taste in their mouths. Invasive technological advancements were also viewed as westernization and individualization of Egyptian society and an erosion of traditional, religious and cultural values (14, 19).

The most relevant opposition to organ donation for UK Muslims, given the demographic makeup of Muslims in Britain, comes from scholars from South Asia and their counterparts in different parts of the world (20-25). In his analysis of two fatwas on organ donation: the first on prohibition by the Pakistani Mufti Muhammad Shafi (25)

and the latter on permissibility by the then Grand Mufti of Egypt, Shaykh Gad al-Haq, Ebrahim Moosa arrives at the conclusion that the differences between the two fatwas lie in how human dignity is framed: whether it is devotional imperative (ta'abbudi) or whether it is bound by its meanings and context (mu'amalaat) so that it may change with new contexts (26).

These differences are apertures for deeper systemic and structural differences which include legal formalism (taqlid) vs. legal eclecticism (talfiq), attitude towards the body and its control, the perception of death and dying and an understanding that the body is a miniature cosmography of the status of society at large. Furthermore, South Asian scholars express concern that in the absence of government-supported transplant programs, fatwas on the permissibility of organ donation will legitimize the demand for organ harvesting the supply of which will most certainly come through illegal organ trafficking and black market organ trade (25).

The above discussion on organ donation in the South Asian context should not be understood to mean that scholars from that region in the world are all against organ donation. There are many scholars who argue for the permissibility of both cadaveric and live organ donation. In fact, Khalid Saifullah Rahmani from the Indian Fiqh Academy goes as far as to argue that in life-threatening cases, one is able to buy an organ however does not support the selling of organs (27). While the above observation is true for the state of organ transplantation in developing countries (14, 25, 28), would the same concerns apply to the UK context? How have fatwas issued in the Muslim world impacted on the fatwas of ulama in the UK? Van Den Branden and Broeckert (29) have already carried out an in-depth study of 70 English Sunni e-fatwas on organ donation and blood transfusion none of which are UK-based. Hence, below I briefly discuss three fatwas specific to the UK only one of which is an e-fatwa.

Organ Donation Fatwas in the UK

Mohammed Ghaly's (8) reading of a fatwa by Zaki Badawi suggests the latter's purposely not engaging or referencing fatwas and studies from the Muslim world was due to the author's eagerness to address the concerns of British Muslims instead of importing from the Muslim world. In 1995, the UK's Muslim Law Council led by Zaki Badawi issued a fatwa of approval for organ donation (30). It was supported by scholars from both Sunni and Shia background and three distinguished lawyers and must have had an impact on the UK medical community, as it warranted notice in the prestigious *Journal of Medical Ethics* (31). In current government campaign for educating UK Muslims on the benefits of organ donation, the National Health Service still refers back to this fatwa (32). Badawi's fatwa particularly tackled the thorny issue

of brain-stem death and concluded based on medical and religious reasoning that harvesting of organs from brain-stem death patients is permissible (30).

A more recent fatwa issue by the European Council for Fatwa and Research (ECFR) in its 6th session in 2000 iterated the declaration of the Islamic Fiqh Academy (IFA) in its entirety (18). The ECFR fatwa fails to mention any of the dissenting views of the IFA conference participants giving the impression that the declaration was wholeheartedly accepted by all (8). For example, one of the presenters at the IFA conference, Abu Sunnah argued against live organ donation (33). The Saudi Scholar Salih b. Fawzan documented his unease with cadaveric donation. The Saudi Scholar Bakr Abu Zayd remained non-committed (3). The ECFR fatwa is silent on these dissenting views. However, it goes on to make its own declarations, which reflect the particulars of a European context. Out of these, the one most pertinent to the UK context at the moment is the declaration permitting deemed consent as a valid form of consent recognized by the Shari'a. It is unfortunate that the fatwa presents this important point in bullet-form without providing the reasoning why it reached this conclusion. The only other fatwa permitting deemed consent is an old Kuwaiti fatwa issued in 1980. However, that fatwa was rejected both by the Kuwaiti ministry of Health as well as the Kuwaiti Parliament (5).

While the above two fatwas subscribe to a permissive attitude towards organ donation, a more ambivalent position can be observed in a third fatwa by the Indian Deobandi Mufti, Muhammad Ibn Adam al-Kawthari (34). In response to a questioner seeking a fatwa on organ donation, al-Kawthari presents the arguments for both prohibition and permission. He writes, 'The views of the contemporary scholars are based upon the general and broad guidelines of Shariah. It is obvious that this will result in difference of opinion, thus no one opinion should be condemned, as the intention of all the scholars is to please Allah, and live a life that is in accordance with Shariah' (34).

Be that as it may, subtle hints can be found for al-Kawthari's preferred position. Al-Kawthari makes it a point to mention that his teacher the Pakistani Mufti, Muhammad Taqi Uthmani decided not to pronounce on the topic given that Uthmani's father; Mohammed Shafi has already presented evidence for its prohibition. Furthermore, al-Kawthari's advice to those who adopt the position of permissibility is indicative of his leaning. One may follow any of the above two viewpoints, as they are both from great scholars of Islam. If one acts on the view of permissibility, then it would be advisable, as a precautionary measure, to seek forgiveness from Allah (istigfar) and donate something in charity' (34).

From the forgoing brief survey of three UK based fatwas, the following observations can be made: (a) The transnational nature of Islamic bioethical deliberations (8), (b) how authority is constructed, (c) the role of context in shaping the contours of a fatwa. Ghaly argues that further research is required to observe the impact of these fatwas on the Muslim community in the West (8).

Interviews with 3 British Muftis

In addition to looking at fatwas on organ transplantation in the UK context, understanding the views of UK scholars vis-à-vis organ transplantation will help gauge the level of engagement with these fatwas and how authority is constructed. Below are discussions on three themes (organ donation, organ reception and construction of authority) extrapolated from interviews I conducted with three UK muftis during the summer of 2016. The dataset is deliberately small as the results of the interviews are to form the evidence-base for a larger project. All three muftis either are born in the UK or have citizenship status. Given the South Asian background of a sizeable number of UK Muslims, the three muftis chosen for the interviews reflect this demographic background. Two of them conform to the Deobandi strand of Islam and the other to the Barelwi school of thought. Their names have been anonymized to protect their identity and pseudonyms have been used throughout the article.

The two Deobandi scholars, Mufti Abu Zayd and Mufti Abu Bakr, completed the Dars-i Nizami syllabus in a UK Darul Uloom. The Dars-i Nizami syllabus founded by Mulla Nizamuddin (d. 1748) of the Farangi Mahall in India in 1695, comprised of a fine balance between the rational sciences (ma'qulat) and the revealed sciences (manqulat) (35-37). It went through a number of permutations and the final standardised version has been adopted in the 25 or so Darul Ulooms in the UK. After completing their UK studies, the two Deobandi Muftis enrolled on to fatwa training programmes in Pakistan. Mufti Aslam on the hand studied the Dars-i Nizami and other modules privately with scholars in the UK and abroad (not South Asia) including a stint in the Middle East. This is as much as can be said about the scholars generally. Further particulars are below. After completing his fatwa course, Mufti Abu Zayd went into researching and issuing fatwas formally. He also worked as a hospital chaplain in a multifaith team and came face to face with ethically challenging situations in his everyday work. Mufti Abu Zayd sits on the advisory panel on a number of Shari'a boards and has been consulted by the UK Government on a number of issues related to Islam and public health. Mufti Aslam is a trained medical doctor and author. He has been consulted on several occasions by Muslim and non-Muslim groups to discuss Islam and health related issues. Mufti Abu Bakr is the youngest of my interviewees. After graduating from the mufti training

programme, he became a full-time imam in a mosque and has ever since been doing so. His exposure to some of the real life ethical challenges is limited to what people divulge to him by way of seeking religious guidance.

Perception on Donating Organs

The first of the three themes identified in the coding frame is their perception on donating organs as opposed to receiving one. One of the main arguments used against the permissibility of organ donation by Sha'rawi and Shafi is that humans are not the owners of their body (25). It is given to them by God as a trust which is to be used responsibly but with limited autonomy. All three interviewees felt that in the case of a living donor, God's ownership is not violated by donating an organ. This came with the caveat that risk is minimal to the donor and that she can lead a healthy life after the surgery.

In the case of cadaver donation, their views were not in unison. Abu Bakr deemed it impermissible to retrieve organs from dead people. Abu Zayd believed that organ donation is only permissible from 'non-beating heart donors' but not permissible from brain-stem death patients. Finally, Aslam maintained that all forms of organ retrieval are permissible from dead donors.

What is the underlying reasoning for their differences? Abu Bakr's argument anchors on two points. The first is the common argument that the body is a trust from God who has loaned it to humans to use with certain restrictions. He argues that to ingest prohibited food items like pork is deemed as a violation of this trust. In similar vein, suicide and donating organs is also a violation of this trust. For Abu Bakr the extent of fair-use of the body terminates with death.

This argument betrays circular reasoning for he is presenting as evidence the very thing he is trying to prove. It is also contradictory since Abu Bakr believes that blood transfusion and live organ donation is allowed. When queried about this contradiction he responded that his main hesitation with cadaver organ donation hinges on a Prophetic statement that the dead feel pain. While a living person can alleviate pain through aesthetic, he argues, what pain control measures are available for the deceased? He says, 'How can you be sure that you won't feel pain and therefore regret your decision? On what religious text are you basing your opinion on that you will be okay in front of Allah on the day of Judgment. It's not just an ethical issue, that if you donate you have mercy and if you do not donate then you don't have mercy. Sometimes our Shari'a is hundred percent not understood by logic, it's what God has stipulated for us.' (Interview with Abu Bakr interview August 2016).

Abu Bakr is taking a cautious approach. Any action

apparently violating the overall sanctity of the human bestowed upon her by God through scriptural mandate requires divine writ to overrule it. In the absence of any such scripture the status quo must be maintained. However, the real question is whether organ donation fares as a concrete example of violation of this sanctity? Furthermore, should metaphysical issues such as pain in the spiritual realm need to bear down on legal issues?

For Abu Zayd, the question of ownership of the body is a non-issue. He believes that the entire discussion on organ donation anchors on how human dignity is perceived. However, what is interesting about Abu Zayd's view is that he does not believe that in this particular instance the Shari'a defines dignity or what constitutes a breach of it. For him, the matter is left to the Muslim society (urf) to decide. He says, 'What I would say, from my reading of the whole area, all dalail (evidence) for and against the rest of it boils down to the dignity of man... So a lot of that (when the Qur'an and hadith are silent) it tends to be left on urf (society). So an urf changes with time and place. So, something that was deemed to be dishonorable yesterday could be honorable today; there are examples of this. So, the question is, 'is organ donation today seen to be honorable or dishonorable, does it desecrate the body or does it not'? I think when it comes to live donors, whether it's bone marrow or whether its kidney, if you hear that somebody has donated their kidney to their brother, for example, the natural reaction to that is not one of horror but one of amazement and admiration, wow! Nobody looks at it and says "Oh my God what has he done" that tends to be the general perception. That's what I would say for live donors. It's not viewed as dishonorable. ... Then if you take that one step further, if you take a kidney and you take other organs, the heart, the liver, the lungs etc. when does that kind of become desecration? And I tend to ask the question, if you consider this is your mother who has died, and they are going to remove her heart, lungs etc. how does one feel about that? When does it reach a level where it becomes desecration? Okay what about external features, nose, eyes, and cornea. Is it just internal features or external features? That is an area where I need to conduct further research.' (Interview with Abu Zayd July 2016).

Abu Zayd's position is interesting since it is suggestive of the possibility that as the Muslim community becomes familiar with the benefits of organ transplantation and reaps its benefits, it will be more susceptible in not viewing organ harvesting as aggression towards the person and be more accepting of it. For him, the Muslim community is not ready to palate any form of invasive meddling with a dead body.

As for why Abu Zayd does not pronounce a fatwa of permissibility for brain-stem death donation. He argues that he is not convinced that brain-stem death is real death

since it does not conform with Islamic understanding of death, which is the exiting of the soul from the body marked by a complete cessation of cardiopulmonary activity (38). Furthermore, it is disputed among medical ethicist whether brain-stem death is real death and certain psychosomatic activities similar to that of a healthy person remains even when the person is deemed brain-stem dead (22, 39).

Mufti Aslam had the most intriguing argument. Commenting on brain-stem death, he argues that trying to pinpoint the exact moment of death is a red herring. The departing of the soul from the body is purely a metaphysical issue which cannot be gauged with any machine. So, the only thing at our disposal is legal death. He maintains that in the life of a person there will arrive a point of no return when widespread cellular death occurs, and no amount of medical intervention will be able to resuscitate the person. 'The light is on but no one is at home.' It is a machine which is artificially pumping oxygen around the body and keeping the heart beating. However, there is no consciousness and the person is no more.

Through the use of legal logic, he develops a strong case for retrieval of organs due to death caused by neurological criteria. He argues that this is the exact moment when scholars permit the removal of assisted ventilation devices (40). Moving from this premise, he extends the logic by arguing that lungs are the internal ventilators of the body. If one is able to stop the ventilator, then why not take the lungs out which are the internal ventilator, he argues. Clearly, Aslam does not seem to see any qualitative difference between switching off the life-support machine and procuring an organ to stop the breathing. One may argue that one is passive non-invasive termination of the body and the other is active invasive ending of life and therefore warrants a distinction.

Perception on Receiving Organ and Necessity (darura)

The forgoing discussion was from the point of view of the donor. What about from the point of view of the recipient? All three scholars were of the opinion that it is permissible due to the necessity (darura) of saving one's life. The darura principle is invoked in order to override an otherwise categorical prohibition in scripture (41). However, there is significant disagreement in how darura is interpreted and applied. Is it an actual necessity or can it be described as potential necessity? For example, an organ for instance may not immediately develop in to an actual life-threatening condition. However prolonged malfunction may have a knock-on effect. In the end a cumulative condition can be described as actual life threatening situation as a result of multiple organ failures (26).

For Abu Bakr it is always actual necessity as opposed to potential necessity which counts. He side-stepped my question on whether it is permissible to use organs from cadaver donors in an actual life-threatening situation. He argued that it is permissible for the patient to receive the organ without questioning its provenance. In other words, he accepted the demand without commenting on the supply.

Both Abu Zayd and Aslam are of the opinion that necessity is both actual as well as potential. Abu Zayd says,

Now if you look at the terminology of the fuqaha (jurists), one is the case of idtirar (emergency), and idtirar tends to be used where a life is threatened. They are all about saving a life. Some say that darura is synonymous with idtirar so it has to be life threatening. But if you look at the usage of the fuqaha, it tends to be wider application of darura. And so it's not only about threatening of life. For me a vital function of the body will also be darura. You can call it what you want. Qualifying need would be where you are restoring the normal function of a body or saving a life. Saving a life, okay, but restoring the function of a body. So for example in this situation nowhere you have a person who's had diabetes and if he was to have a transplant, for me that will qualify as a darura already, irrespective of what is to happen in the future. (Interview with Abu Zayd, July 2016)

Aslam further extends this argument. He poses the question whether darura is about immediacy, understood as 'time bound' or whether darura is about the 'certainty of occurrence'. He argues for the latter option and laments that thinking about necessity as immediate and time-bound is individualization of an issue without looking at the greater picture. By way of example he mentions a scenario where a group of people were starting off on a desert expedition. At the entrance to the desert they find a casket of beer. Would it be permissible for the group to take this casket of beer with them just in case their water runs out? Aslam's reasoning is that it's about the immediacy that brings about a certainty. Moving on from this example he makes the point that once one looks beyond their individual selves they will see that there is a perpetual need for organs. He says that in the life-time of a preserved cornea-tissue, statistically there is a hundred percent chance that someone will need that tissue. The implication of Abu Zayd and Aslam's opinion is far reaching. If darura is to include potential necessity in addition to actual necessity, this opens up doors to legitimizing organ banks.

The darura argument is invoked when there is a tension between a specific command of God (nass) and His general purpose (hikma) extrapolated from the specific text (41). By default, the over-riden text is one of prohibition and the darura-principle is invoked in order to temporarily legitimize the action. For Aslam, to start the

discussion on organ donation from the position of darura is a false premise. He argues that since there is statistical certainty that someone somewhere will always require an organ, the default position should shift from one of accommodation to that of permissibility from the outset. Aslam complains that the advocates of organ donation are bad at promoting their position by classifying it as a mere permissibility. Out of the five legal norms (obligatory (wajib), recommended (mandub), permissible (mubah), disliked (makruh) and prohibited (haram)) used in Islamic legal theory to classify all actions by the legally competent person (42), organ donation oscillates between the prohibited (haram) and neutral (mubah/halal) positions with all scholars maintaining prohibition as the default position. Aslam makes the point that in the mind of an ordinary person, considering the emotional and psychological tension between an act that may be prohibited or merely permissible, it is always the prohibited that tilts the scale. He argues that since there is widespread need of organs on the level of certainty arrived through statistical data; no longer can the issue be viewed through strict legal lens. An argument from virtue-ethics need to be made where the default position starts from 'permissible' moving towards 'recommended', which will include acts of charity, acts of worship, acts of preservation of humanity and gradually crouch towards the 'obligatory'. Aslam maintains that organ donation does not only fulfil the broader objective of the Shari'a relating to preservation of the self, but interestingly it also fulfils a second objective related to the preservation of religion. The broader objectives of the Shari'a are universal principles the preservation of which is the *raison d'être* of the Shari'a (Opwis 2005, 2017). They include: the preservation of religion, life, honor, rational faculty, wealth and progeny. All of these principles have further categorization depending on their urgency and importance. These are known as the levels of gravity (maratib al-masalih): They are vital necessities (darura), valued interest (hajah) and supplementary interests (tahsin) (Opwis 2017, 10). Aslam argues that if one was to be given a second chance to live through receiving an organ, one will have many more years to find God or to repent from their sins. It is only when such forceful ethical claims are made that Aslam believes people will start responding to organ donation properly.

Organ Transplantation and Religious Authority

The above two themes give the impression that a compelling and convincing ethico-legal discussion may prove to be decisive when it comes to deciding whether organ donation and transplantation should be allowed or not. However, the two British fatwa discussed above (The ECFR 2000 and al-Kawthari 2004 fatwas) demonstrate the transnational characteristics of such fatwas and how UK ulama are relying on the fatwas issued in the Muslim

world for guidance. The interview participants also agreed with this view and accepted that at least for the British ulama and by extension, the UK Muslim community it is not theological arguments that will sway their opinions but what elderly authorities (akabir ulama) from their sphere of influence have pronounced on the issue. Commenting on the efficacy of international Islamic law organizations for UK Muslims, Abu Zayd says, 'To be honest for the people from the Indian Sub-continent, the Majma'at al-Fiqhi al-Islami can say whatever they want, but if Mufti Taqi Uthmani says one thing the whole of the sub-continent is fine with it. Do you understand. So, it's who you have trust in your particular manhaj (religious affiliation).' (Interview with Abu Zayd, July 2016).

The other two interviewees concurred with this view. Abu Bakr went to the extent to say that if Mufti Muhammad Taqi Uthmani issued a fatwa of permissibility for organ donation, he and many other Deobandi scholars residing in the UK will immediately follow suit.

One of the reasons for this may be the lack of expertise or lack of confidence among UK ulama to carry out intensive research on a local level, which may overturn the fatwas issued in the Muslim world. In answer to my question relating to who the most qualified ulama on bioethical issues are in the UK, Aslam responded that bioethics is a massively underdeveloped field and the UK ulama do not have access to proper resources. He argued that the ulama in the UK are too general in their knowledge and there needs to be a professionalization of the ulama class where they can specialize in specific areas of research. Abu Zayd also said something along similar lines, 'It's all second hand, third hand information, its exposure, so and so has written this. They won't have any books on medical ethics. [...] Unless they are going to academia and developing their expertise and have some kind of influence otherwise, they don't go past Bukhari and the sad thing is if the whole system is like that it stops there and that's it.' (Interview with Abu Zayd, July 2016).

Conclusion

One of the limitations of this study is the small data-set employed to make observations. The data captured three differing views towards organ donation and two towards organ reception. Further research is required to ascertain whether this is a trend among UK ulama. Furthermore, a more extensive data-set will reveal if there is any shift or leaning towards any one particular view. By thematically coding and analyzing the data using Nvivo, what immediately became apparent is the non-scriptural arguments that respondents made. In the absence of clear scriptural evidence, the respondents employed a form of eisegesis where they projected their understanding of what it means to be a human, and how death and dying is to be conceived. Their personal biography is a factor in their decision making. Fatwas and religious opinions

are socially constructed to fit a particular understanding of the human vis a vis God and his relation to religion. At times this understanding emanates from an anxiety over pronouncing on something about which the Shari'a has provided no direct guidance. Other times it's related to how society translates dignity and desecration. A narrowly scientific understanding of death is presented as a counter-argument to its metaphysical aspects. Looking beneath the surface of the discussion on organ donation, one realizes that it falls at the intersection of the ethico-legal and the anthropological. What appears to be, at first blush, scripturally informed arguments are in reality filtered through certain sociological attitude towards death and dying.

The sociologist Bryan Turner (43) argues that people conceptualize the body in two ways: the first is through embodiment i.e. human beings have a body and possess a body; and secondly through enselment that human beings are a body. The idea that humans have bodies is based on a Cartesian distinction between the soul/person and the body, which regards the body as simply a machine directed by the instructions of the soul (44). The body as a machine and therefore a conglomeration of disparate interchangeable body parts is a view compatible with organ transplantation and one generally advocated by certain groups such as doctors (45). However, studies have shown that the more integrated body parts are to the idea of personhood, the more sacred they are considered and less likely to be donated. The idea is in part based on how we view our 'body image' which may not necessarily have any relation to biological facticity but can be influenced by history, tradition and custom. In Islam there is an intimate connection between the body and the soul and the belief that both body and soul will be resurrected on Judgment Day, which explains why there is much anxiety around the subject of organ donation (46).

In addition to the above, certain fatwas have had an influential grasp, first and foremost on British ulama and by extension on the UK Muslim community. For UK Deobandi ulama, Shafi's 1967 fatwa issued in Pakistan is viewed as the final say on the subject which can only be overturned by an authority of similar credibility like his son Taqi Uthmani. The Barelwis take as their authority the fatwa of Mufti Akhtar Reza Khan (23) the great grandson of the veritable founder of the movement Ahmad Reza Khan. If any successful intervention is to be had by employing the services of UK ulama, a number of steps need to be taken on the theological front (as opposed to the community engagement front). Step 1 is to highlight the local as opposed to the transnational nature of fatwas issued in the Muslim world. A thorough re-reading and interrogation of fatwas issued on the topic in the Muslim world need to be undertaken. These are to be studied in such a way that they are not only filtered through the lens of theology and law, but also by investigating the cultural, social and political contexts in which these fatwas were

written in and then decide whether they mirror their ground reality in the UK or not.

Step 2 will include ruminating on the style of delivery. What is gleaned from Abu Bakr and Abu Zayd's interview data is how society is to view the human body. Since death and dying are delicate subjects and handling a deceased family member is fraught with emotions, an approach that is sensitive to this will go a long way. Rigid scientific arguments like Aslam's position on brain-death may fall on deaf ears, however his argument for a shift in the discourse on organ donation may prove to be successful. If proponents of organ donation are to get traction for their view, they radically need to change their discourse from one of mere permissibility (*mubah*) to a nomenclature which connects with the everyday concerns of people using non-technical simple language; a language that argues for organ donation from the point of view of not only law and ethics but virtue, charity and reward.

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References

1. Robinson F. Technology and Religious Change: Islam and the Impact of Print. *Modern Asian Studies*. 1993;27(1):229-51.
2. Ma'mun H. *Naql Uyun al-Mawta ila al-Ahya'*. Al-Fatawa al-Islamiyya min Dar al-Ifta' al-Misriyya 7. Cairo Ministry of Religious Affairs; 1997. p. 2552-54.
3. IFA. Declaration of the Islamic Fiqh Academy in its 8th Session (1985). *Majallat al-Majma'at al-Fiqhi al-Islami*. 1985, 2003 reprint;1(1):77-80.
4. IIFA. Resolution on Organ Donation of the International Islamic Fiqh Academy in its 4th session (1988). *Majallat al-Majma' al-Fiqh al-Islami al-Duwali*. 1988;4(1):507-10.
5. Albar MA. *Al-Mawqif al-Fiqhi wa al-Akhlaqi min Qadiyat Zar' al-A'da'*. Damascus: Dar al-Qalam; 1994.
6. Alghrani A. Womb Transplantation and the Interplay of Islam and the West. *Zygon*. 2013;48(3):618-34.
7. Rasheed SA, Padela AI. The Interplay Between Religious Leaders and Organ Donation Among Muslims. *Zygon*. 2013;48(3):635-54.
8. Ghaly M. Religio-ethical discussions on organ donation among Muslims in Europe: an example of transnational Islamic bioethics. *Medicine, Health Care and Philosophy*. 2012;15(2):207-20.
9. Isgandarova N. Practical Theology and its Importance for Islamic Theological Studies. *Ilahiyat Studies: A Journal on Islamic and Religious Studies*. 2015;5(2):217-36.
10. Abu Zayd B. *al-Tashrih al-Juthmani wa al-Naql wa al-Ta'wid al-Insani*. *Majallat al-Majma' al-Fiqh al-Islami al-Duwali* 1988;4(1):146-85.
11. Yaqubi I. *Shifa al-Tabarih wa al-Adwa' fi Hukm al-Tashrih wa Naql al-A'da'*. Damascus Matba'ah Khalid ibn al-Walid; 1987.
12. Scott R. *The Body as Property*. New York The Viking Press 1981.
13. Albar MA, Chamsi-Pasha H. *Contemporary Bioethics*: Springer; 2015.
14. Hamdy S. *Our Bodies Belong to God: Organ transplants, Islam, and the struggle for human dignity in Egypt*. Berkeley: University of California Press; 2012.
15. Ghaly M. The Beginning of Human Life: Islamic Bioethical Perspectives. *Zygon*. 2012;47(1):175-213.
16. Skovgaard-Petersen J. A Typology of Fatwas. *Die Welt des Islams*. 2015;55(3-4):278-85.
17. Abdullah S. *Al-Ijtihad al-Jama'i wa Ahmiyatuh fi Nawazil al-Asr*. *Majallat al-Majma' al-fiqhi al-Islami*. 2010;25:47-74.
18. ECFR. Organ Donation: Resolution of the sixth session 2000 [Available from: <https://www.e-cfr.org/%D9%86%D9%82%D9%84-%D8%A7%D9%84%D8%A3%D8%B9%D8%B6%D8%A7%D8%A1/>]
19. Hamdy S. Rethinking Islamic legal Ethics in Egypt's Organ Transplant Debate. In: Brockopp J, Eich T, editors. *Muslim Medical Ethics: From Theory to Practice*. Columbia, South Carolina: University of South Carolina Press 2008. p. 78-93.

20. Ajmeri E. Fatwa on Organ Donation Online: Ask Imam; 2011 [Available from: http://askimam.org/public/question_detail/19132]
21. Umar A. Fatwa on Organ Donation Online: Ask Imam; 2008 [Available from: http://askimam.org/public/question_detail/16282]
22. Mohammed A. Harvesting the Human: Traditional Sunni Islamic Perspective Online: IRTIS; 2017 [Available from: <http://www.irtis.org.uk/images/organs.pdf>]
23. Khan MAR. Azharul Fatawa: a few English fatawa. Durban Habibi Darul Ifta; 1991.
24. Sanbhali Ba-d. Hukm al-Shari'at al-Islamiyyah fi Zar' al-A'da' al-Insaniyyah. Al-Ba'th Al-Islami. 1987;23(2):44-55.
25. Shafi M. A'da' Insani ki Pewandkari. In: Shafi M, editor. Jawahir al-Fiqh. 7. Karachi Maktaba Darul Uloom Karachi 2010.
26. Moosa E. Transacting the Body in the Law: Reading fatawa on organ transplantation. Afrika Zamani: Revue Annuelle d'histoire Africaine. 1998(5-6):292-317.
27. Rahmani KS. Jadid Fiqhi Masa'il. Vol. 5, Karachi Zamzam Publishers 2010.
28. Moazam F. Bioethics and Organ Transplantation in a Muslim Society: A study in culture, ethnography, and religion. Meslin E, Miller R, editors. Bloomington and Indianapolis Indiana University Press; 2006.
29. Van Den Branden S, Broeckaert B. The Ongoing Charity of Organ Donation. Contemporary English Sunni fatwas on Organ Donation and Blood Transfusion. Bioethics. 2011;25(3):167-75.
30. Badawi Z. Organ Transplant 1995 [Available from: <http://www.iol.ie/~afifi/Articles/organ.htm>]
31. Raanan G. UK's Muslim Law Council Approves Organ Transplants. Journal of Medical Ethics. 1996;22:99.
32. NHS. Islam and Organ Donation: A guide to organ donation and Muslim beliefs. In: Transplant NBA, editor. www.wales.nhs.uk/sitesplus/866/opendoc/1941892009.
33. Abu Sunnah AF. Hukm al-Ilaj bi Naql Dam al-Insan aw Naql A'da' aw Ajza' minha. Majallat al-Majma' al-fiqhi al-Islami. 1985, 2003 reprint 1(1):47-54.
34. Kawthari MIA. Organ Donation & Transplantation 2004 [Available from: <http://www.daruliftaa.com/node/5896>]
35. Geaves R. Drawing on the past to transform the present: contemporary challenges for training and preparing British imams. Journal of Muslim Minority Affairs. 2008;28(1):99-112. Theory. 3rd ed. New York: SAGE Publications; 2008.
36. Robinson F. The 'Ulama of Farangi Mahall and Islamic Culture in South Asia: Orient Blackswan; 2001.
37. Zaman MQ. The Ulama In Contemporary Islam: Custodians Of Change. Eickelman D, Piscatori J, editors. Princeton, Oxford: Princeton University Press; 2010.
38. Padela AI, Arozullah A, Moosa E. Brain Death in Islamic Ethico-Legal Deliberation: Challenges for Applied Islamic Bioethics. Bioethics. 2013;27(3):132-9.
39. Rady MY, Verheijde JL, Ali MS, editors. Islam and end-of-life practices in organ donation for transplantation: new questions and serious sociocultural consequences. HEC forum; 2009: Springer.
40. Qaradawi Y. Fataawa Mu'asirah. 4th ed. Kuwait: Dar al-Qalam; 2004.
41. Brown D. Islamic Ethics in Comparative Perspective. The Muslim World. 1999;89(2):181-92.
42. Taftazani Sa'd al-Din. Sharh al-Talwih 'ala al-Tawdih. Cairo: Maktabat Sabih; N.D.
43. Turner BS. The Body and Society: Explorations in Social Theory. 3rd ed. New York: SAGE Publications; 2008.
44. Haddow G. The Phenomenology of Death, Embodiment and Organ Transplantation. Sociology of Health and Illness. 2005;27(1):92-113.
45. Haddow G. Organ Transplantation and (Dis) embodiment: Department of Sociology, University of Edinburgh; 2000 [Available from: www.sociology.ed.ac.uk/research/working_papers/show_paper?result_page=18]
46. Hayward C, Madill A. The meanings of organ donation: Muslims of Pakistani origin and white English nationals living in North England. Social science & medicine. 2003;57(3):389-401.

Contemporary Bioethics: An Islamic Perspective (Mohammed Ali Al-Bar and Hassan Chamsi-Pasha)

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Al-Bar and Chamsi-Pasha have provided the world with a comprehensive encyclopaedia on all issues related to bioethics from an Islamic lens. This piece of work provides the reader with an all-inclusive introduction to the matters being discussed as well as a balanced approach to the Islamic opinions on selected case studies that are seen as contemporary on the current scene. This work is split into three segments, the first are labelled as introductory chapters and they discuss the definition of ethics, as chosen by the authors, as well as issues fundamental to later chapters such as the origins of Islamic morality and ethics and the oath of a Muslim physician. The second segment discusses the four principles of biomedical ethics with an Islamic perspective, namely: autonomy, nonmaleficence, beneficence and justice. Finally, the third segment collates contemporary issues related to bioethics and aims to provide Islamic evidence to the opinions of the scholars on these issues. Some of the issues Al-Bar and Chamsi-Pasha tackle are abortion, organ transplantation and end-of-life care. In the following paragraphs we will delve deeper into each of the segments to understand the opinions and facts provided by the authors on this hugely important subject.

Part 1, titled introductory chapters, is broken down into an introduction which provides a solid foundation to the book by covering the history of bioethics within Islamic literature and discussions, but it also covers the basics of religion, covering topics such as the six pillars of Islamic creed as well as other notable differences such as the foundational sources of jurisprudence in Islam and the different Sunni legal schools of thought. The authors proceed to introduce the sources of common principles in morality and ethics. They identify three main sources: intuitive reasoning (i.e. the basic innate constitution of human beings), the faculty of reason and divine revelation. The rest of chapter 2 covers specifically religious issues and providing the reader who is not learned in Islamic knowledge with the background information they would require to understand the perspectives the authors delve into in later chapters.

Chapter 3 introduces an important concept which is central to Islamic teachings. The five cardinal essentials of religion

involve the preservation of all of the following: faith, life, mind, progeny and property. These are central to the majority of scholarly opinions on issues related to the worldly life in Islam. The authors quote Ibn Qayyim who said: "Al-Shari'ah fundamentals are built on keeping the interests (masalih) of the people during this life and hereafter. These objectives are built on justice, mercy, wisdom and interest of the creatures. Therefore, any situation which perverts from justice to injustice, from mercy to cruelty, from wisdom and utility to chaos and futility is outside the scope of Shari'ah." It is with this in mind that the authors begin to introduce the Islamic perspective on contemporary bioethical issues. Further information is given on the sources of decision making in Islam, some surplus to requirements of understanding the decisions and opinions on bioethics, but still useful to know. In chapter 4, we begin to see the medical profession being introduced. Al-Bar and Chamsi-Pasha make the observation that when it comes to moral values, the Islamic perspective is not an exclusive one, and many scholars have indeed attempted to combine the ideas of notable non-Muslim philosophers such as Aristotle and Galen. What could be considered unique to Islam, is the importance and high status given to intentions and motivations when it comes to actions and values. In the teachings of the prophet about the motivation of such values, he was reported to have said: "Deeds and acts will be judged by the intention and motive". As is common in this piece, Al-Bar and Chamsi-Pasha include much more than Islamic perspectives on issues relating to bioethics, it is in chapter 4 that they discuss important virtues in medicine, including compassion, discernment and trustworthiness, but there is direct mention of how this relates to the Islamic perspective of bioethics.

Possibly, most useful for a Muslim reader with an interest in Islamic opinions on contemporary bioethical issues, will be part 3. Al-Bar and Chamsi-Pasha provide a comprehensive overview of each topic. They start by defining the terms related to the topic before giving multiple views, both Islamic and non-Islamic on the topic in question. For the purpose of this review we will discuss chapter 10, abortion, as well as chapter 13, organ transplantation.

Chapter 5 discusses the regulation of the medical profession and issues related to medical research. Al-Bar and Chamsi-Pasha introduce the chapter with a hugely important quote by Imam Shafi that states: ““There are two kinds of persons who are indispensable for people. The scholars (of religion and law = ulema) for dealing with their matters of religion, and physicians for dealing with their bodies.”. This quote sets the scene for their exploring of important topics related to the regulation of medicine such as medical oaths and codes, confidentiality and consent. The Hippocratic oath is probably the most popular of any medical oaths known to lay people. However, in 1981, at the First International Conference on Islamic Medicine which took place in Kuwait, Al-Bar and Chamsi-Pasha report that the conference adopted a medical oath specific to Muslim physicians, which was introduced by Dr Hassan Hatout. It was originally based on Hippocrates oath. Necessary changes were made to fit with the Islamic teachings. Many schools of Medicine adopted it in a shorter version. While there is no comment by the authors whether this is a requirement from Muslim physicians, or who enforces it, its placement in this context highlights the importance of an Islamic perspective on issues that can seem as the most mundane or can sometimes be overlooked when discussing ethics.

The Oath of a Muslim Physician: In the name of Allah, Most Gracious, Most Merciful. Praise to Allah, the Sustainer of His Creation, the All-Knowing. Glory to be Him, the Eternal, the All-Pervading. O Allah, Thou art the only Healer; I serve none but Thee, and, as the instrument of Thy Will, I commit myself to Thee. I render this Oath in Thy Holy Name and I Undertake: To be the instrument of Thy Will and Mercy, and, in all humbleness, to exercise justice, love and compassion for all Thy Creation; To extend my hand of service to one and all, to the rich and to the poor, to friend and foe alike, regardless of race, religion or color; To hold human life as precious and sacred, and to protect and honor it at all times and under all circumstances in accordance with Thy Law; To do my utmost to alleviate pain and misery and to comfort and counsel human beings in sickness and in anxiety; To respect the confidence and guard the secrets of all my patients; To maintain the dignity of healthcare, and to honor the teachers, students, and members of my profession; To strive in the pursuit of knowledge in Thy name for the benefit of mankind and to uphold human honor and dignity; To acquire the courage to admit my mistakes, mend my ways and to forgive the wrongs of others; To be ever-conscious of my duty to Allah and His Messenger (PBUH), and to follow the precepts of Islam in private and in public. “O Allah grant me the strength, patience and dedication to adhere to this Oath at all times”.

Part 2, discussing the four principles of biomedical ethics with an Islamic perspective, is the shortest of the three segments and discusses in detail the topics of autonomy of the medical professional as well as the patient,

nonmaleficence (i.e. doing no harm), beneficence and justice. For each of these topics Al-Bar and Chamsi-Pasha provide the religious opinion on them, as well as providing historical western context on their incorporation within contemporary medicine.

Al-Bar and Chamsi-Pasha break down autonomy into two essential conditions; free will and the capacity of intentional action. The authors point to the importance of recognising cultural differences when practicing medicine to patients from different cultural backgrounds to the medical professional. Part of these cultural differences might mean the amount to which family and close friends impact a patient’s decisions. Multiple cases from the past are noted in this chapter where operations were undertaken in Muslim countries with only the consent of the family sought, with the patient unaware while being in a state to be able to give or refuse consent. This has been condemned by the majority of scholars and classed as impermissible. On the topic of nonmaleficence, Al-Bar and Chamsi-Pasha give 13 axioms dealing with warding harm in the Islamic jurisprudence, most interestingly however is that; the greater harm can be replaced by a lesser harm’ and ‘the prohibited is allowed if there is a necessity’. An additional axiom is mentioned, that is important in the case of bioethics is that the harm befalling a whole community is worse than the harm befalling an individual. This is referred to by Al-Bar and Chamsi-Pasha when discussing the issue of forcefully treating patients with contagious diseases, that they harm they possess to their community and the potential of spreading diseases outweighs the issue of consent.

In part 3, Al-Bar and Chamsi-Pasha provide case studies of contemporary bioethical issues, some of which have seen significant controversy in Muslim communities. On the issue of abortion, the authors provide the reader with the definition of abortion in all its potential stages and provide the Islamic opinion on it for its multiple potential reasons. The opinion stated in this chapter is that abortion is allowed only if continuation of pregnancy would be dangerous to the expectant mother, or if there is proven serious congenital anomaly in the embryo or fetus. The time limit for carrying out such abortions is 120 days computed from fertilization, which is considered the time of ensoulment according to the Hadith (saying) of the Prophet (PBUH). This is equivalent to 134 days from the Last Normal Menstrual Period. The only other reason added by following fatawa, gave permission for abortion after an incident of rape, where the Islamic Fiqh council of Islamic World League encouraged it should be performed as early as possible and in the first 40 days of pregnancy.

The second case study to be discussed in this review is that of organ transplantation. In chapter 13, Al-Bar and Chamsi-Pasha provide a comprehensive discussion on organ transplantation, in its multiple variations (i.e.

autograft, allograft and xenograft), as well as a brief history of transplantation procedures and advancements. Al-Bar and Chamsi-Pasha provide various Fatwas and opinions on all variations of organ transplants and donation, but eventually concluding that it is a highly complicated issue and any answer to it must include the important issues around informed consent, providing psychological care where required, as well as the greater good argument of requiring greater donated organs to meet demand, whilst ensuring no exploitation takes place.

The book is a dense read, and at times spends too much time explaining topics before providing the Islamic perspective, leaving the reader covering things that may be basic. However, for a novice on this topic, this book ensures that they are well equipped with all the information on the subject and case studies before providing the reader with the Islamic opinions. I suggest utilising the contents page on this matter, this is not necessarily a book that has to be read from cover to cover but can be picked up and utilised for deep reading depending on the requirement of the reader. Al-Bar and Chamsi-Pasha have done a huge service to the Muslim, and non-Muslim, communities by compiling this literature together, as this area is at times a hugely controversial subject with little expert opinions dominating the discussions. By providing this work free through open-access, Al-Bar and Chamsi-Pasha have shown their true hope of ensuring this work brings real evidence to these discussions and can be used by any one on their quest of learning.

To read this book please head to <https://www.springer.com/gp/book/9783319184272> for the open access eBook version.

Mosque Lifesavers - A Public Health Revolution

*Dr. Mohammed Wajid Akhter. BIMA, Vice President & LifeSavers Project Lead
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When we think of public health, our minds often go to large scale governmental initiatives such as fluoridation of water, banning smoking in public spaces and traffic control measures to reduce pollution from cars. While these are all accurate examples, there is another way of implementing public health messages that is more grassroots.

The Mosque Lifesavers project is one such example. It has completely reimagined public health and come up with some surprising results. In place of a governmental approach, the project is organised by healthcare professionals from within local communities. Rather than educating the public through marketing campaigns, the venues are mosques that are based within the heart of the community. Instead of focusing on a specific locality, the Mosque Lifesaver project can be replicated anywhere across the world.

Why focus on Basic Life Support?

This is an issue of life or death (literally) but also, it fills a gap in the current public health arsenal of nations worldwide. Teaching all citizens Basic Life Support is something that need not cost a great deal, but will have significant return on investment. Yet, somehow, countries of all shapes and sizes fail to have a system to teach it.

In addition to the above, Basic Life Support is something that every single healthcare professional is trained in and could conceivably train others in without the need for expensive equipment or even a lot of time.

Why the mosques?

We needed a venue that was free of charge, present worldwide and that resonated with the local community. The mosque was an ideal candidate that ticked all the boxes. In addition to this, there is a great deal of benefit that can come from increasing the links between healthcare professionals and mosques - such as future educational events on immunisation, cancer screening or indeed any other form of health promotion. The Mosque Lifesaver project started life in the British Islamic Medical Association, but has since been taken up by other Islamic

Medical Associations via FIMA (the Federation of Islamic Medical Associations). It has the ability to not just provide a valuable service to communities across the world, but to rethink how public health is delivered to them too.

What is a Hospital Chaplain?

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A chaplain is an individual that provides religious and pastoral care within an organised setting ranging from Hospitals, Universities, Prisons and military and recently airports and supermarkets.

In the NHS, the NHS Occupation Standards define the purpose of a chaplain is to ‘enable individuals and groups in a healthcare setting to respond to the Spiritual and emotional needs and to the experiences of life and death, illness and injury, in the context of a faith or belief system’.

It is important to note the term ‘chaplain’ does not exist in the Islamic faith – the term ‘Muslim Chaplain’ has been taken from the Christian word ‘Chaplain’ and adapted for Chaplains working for Muslim faith communities.

The development and growth of Muslim Chaplaincy

Two crucial points indicate the development of Muslim Chaplaincy: firstly, as a result of migration, hospitals started to welcome volunteers from other communities to come visit patients of their faith which otherwise would have been visited by the Christian hospital chaplain, termed ‘chaplaincy faith volunteer visitors’ their main duties were to visit patients, arrange prayer provisions for the hospital trust and sometimes act as an advisory role to staff and management on faith issues such as halal hospital food.

Secondly, the 1991 ‘Patient Charter’ prioritised the religious and spiritual needs of patients, regardless of faith tradition: the charter laid down standards and targets for healthcare services in the NHS UK, one of the nine standards was to ‘respect for privacy, dignity and religious and cultural beliefs’ this required healthcare setting to show how they met these requirements and Chaplaincy was one source of ensuring this was done. This was a crucial time for Muslim chaplaincy, it saw the shift from a volunteer visitor role to one of a paid a chaplain role, which meant the role, could now contribute more to patient care and Muslim chaplains were recognised as members of hospital Chaplaincy teams.

Today, we see Muslim chaplains pioneering the way for ethical medical practice, we have male and female chaplains, chaplains have good knowledge and awareness

of Islamic Medical Ethics enabling them to provide staff, patients and families with knowledge and information to make decisions in hospital treatment.

Some Chaplains are qualified religious scholars (Allim or Allima) and currently we have a Mufti who works as a Muslim Chaplain, Mufti Zubair Butt contributes and advises regularly on medical ethics and recently issued a Fatwa regarding Organ donation.

The approach the Chaplains use is to work closely with healthcare teams and support them to deliver informed healthcare outcomes and choices for Muslim families, where necessary using Islamic teachings. For example, our Islam and Chronic Pain leaflet supported the Physiotherapy department in engaging Muslim patients in physiotherapy exercise as there was a high level of DNA’s from Muslim patients, using Islamic teachings relating to seeking treatment and maintaining good health, a leaflet was written to encourage patients to access rehabilitation treatments to help maintain good health and wellbeing. Similar leaflet was written for Born in Bradford, this time to increase the cohort of Muslim Families to participate in healthcare research, this saw a significant increase in the recruitment from the Muslim community, which was ideal because the research will directly impact on health issues relating to Muslim families e.g.: Diabetes and Asthma.

In an advisory role, Chaplains in Bradford also provide regular support to the Psychology team to help them support selection of Halal alternatives in medicine and vaccines.

In a pastoral role, Muslim Chaplains support senior doctors when they have to break bad news to families; they play a role in doctor’s consultations and considerations for treatment by being involved in MDT’s and staff debriefs discussing withdrawing of treatment, switching life support machine, organ donation, halal medicine.

Additionally, many chaplains also deliver lectures/training days for nursing and medical teams on topics of medical ethics and religious considerations e.g.: West Yorkshire Cancer Study, Martin House Hospice Equality and Diversity Training for staff, Ramadhan Awareness

Training, Mental Health/Psychology study days.

The pioneering work of Chaplains is making faith accessible to all, one may say Muslim chaplains are humble in their contributions but their work certainly sets the foundation for staff and clinicians to uphold Islamic ethics in clinical practice.

References

<http://www.nhs.uk/careers/explore-by-career/wider-healthcare-team/careers-in-the-wider-healthcare-team/corporate-services/chaplain>

My Leadership Journey

Dr Shahid Wahid. *MBBS Ncl Cert. Med. Ed. Ncl FRCP Lond FRCP Edin*

As I contemplate the next stage of my expanding Medical Director role in a new Trust (South Tyneside and Sunderland NHS Foundation Trust) I have reflected on my journey.

Medical leadership in my experience can be placed in 3 broad areas that do overlap: clinical, educational and management leadership.

“If I have seen further, it is by standing on the shoulders of giants”-Sir Isaac Newton.

The above quote aptly describes my journey to date from my medical student days from 1990 at Newcastle University through to where I am. I really have stood on the shoulders of many a giant as I learnt my leadership skills.

As a medical student it was the clinical leadership of the Diabetologists and Endocrinologists that inspired me and helped me develop clinical leadership in my specialty up to the point of Consultant hood. I must also pay due note to those Physicians that have been the giants in general medicine, particularly in North Tees, that encouraged me to maintain my general medicine skills and develop skills in acute medicine. Through training I have been lucky enough to have engaged in educational and management leadership through being an Associate College Tutor, a trainee representative on training committees and Trust management committees-contributing in practical ways to better patient care. It is this that has stood me in good stead to continue my clinical and educational leadership by developing services in Diabetes & Endocrinology and Acute Medicine locally and delivering educational change locally and in the region through various positions.

It was a giant of a Medical Director that inspired me and supported me to become Medical Director at South Tyneside. The last 3-years I can only describe as analogous to a sword being put through fire to build strength. I have never had any media training or formal management training in terms of a degree, as I have often undertaken and completed a number of tasks with the term “got the t-shirt” being my credentials. It has been the “generic” clinical, educational and management leadership skills that I have built over the years by standing on the shoulders of giants that has allowed me to undertake service change at

a macro-level and deal with crisis such as suspension of maternity services and retained organs.

I have encountered a range of leadership styles over the years and my style can be described as:

“I use a combination of position, responsibility, attitude, skills and behaviour to allow others and the Trust to maximise potential and deliver the very best patient centred services in a sustainable manner”.

I have two pieces of advice:

Allow others to stand on your shoulders to see further and maximise their potential. They will remember you as I remember all the giants’ shoulders I have stood on.

Leadership skills in management are but the sum of the leadership skills we all display in clinical practice and teaching. Continue to hone the latter and consider at some point in your career to broadening them to management.

An emotional reflection on the early experiences of a junior doctor within the maternity ward

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The Arabic word mercy (Rahma), a fundamental attribute of God in the Islamic tradition has its roots in the Arabic and Hebrew word for womb (Rahm)¹. It is said in a Prophetic saying of Muhammad, Peace be upon him, that God's mercy and compassion for His creation is greater than that of a mother for a new born child². Moreover, it is narrated in a Hadith Qudsi that, 'I Am Ar-Rahman. I created the "Rahm" (womb) and derived a name for it from My Name. Hence, whoever keeps it (family ties), I will keep ties to him, and whoever severs it, I will sever ties with him.' I came to deeply reflect on these ideas and sayings during an elective caesarean section I was assisting in. The mother was known to have placenta accreta, and the events that followed during and after the case had a profound effect on my practice as a junior doctor.

Foundation Year (FY1) was a difficult year for me spiritually, physically and emotionally. Difficult personal circumstances and bereavements in the family meant I couldn't quite enjoy my new job as some of my colleagues. And a sense of disillusionment from the outset lingered, making me question what path I wanted to pursue long term. Moreover, low morale within the NHS ranks was evident, and was beginning to affect me too. Six months in, and life as a doctor felt nothing more than service provision that paid a reasonable salary. Suffice to say, compassion fatigue was rife and I was finding it difficult to connect with the suffering of my patients beyond the symptoms they presented with.

This changed somewhat halfway through my placement. I was assisting my consultant in a routine Caesarean section, and we were aware of the patient's placenta accreta on her scan. I was told that the case might be difficult during the team debrief, but I didn't take much notice of it. The patient, a young lady from Ghana delivered a beautiful baby boy, with her partner present in the operating theatre.

What followed was a very dramatic shift in emotions. From the jubilation and tears of happiness from the new mother and father, the consultant and I were unable to control the patient's bleeding when we were closing the uterus. Suddenly, another consultant obstetrician

was called to assist. The father and the new born were whisked away from the theatre, and the mother started to lose consciousness. The anaesthetist had triggered the major haemorrhage protocol, and the atmosphere became palpably more intense.

Despite the severity of the bleeding, I didn't think there would be any issues of mortality. From my understanding, maternal deaths through haemorrhage were a phenomenon that was more prevalent in under resourced health systems in low middle-income countries. The skilled obstetricians and anaesthetists alongside the theatre staff would surely manage the bleeding. And they did. Mother and baby had survived.

The following day, we went to see the patient on the obstetrics ward, and the family seemed happy. However, it was only when the patient was being discharged a couple of days later that I came to understand the severity of the issue from the patient's side. At the time, I was extremely busy with some administrative work, when a gentleman approached me. I immediately became concerned as I felt he would ask me to undertake another task to add to my list of jobs. Yet when we spoke, he said to me, 'thank you for what you and your team did for my wife the other day. I thought I was going to lose her'. At this point, I recognised that the gentleman was actually the husband of the patient with placenta accrete we had operated on.

I had not received gratitude like this thus far in my career. And it really made me evaluate my initial approach to the gentleman when he came to speak to me. The gravity of his words struck a sense of disappointment in myself. Whilst I was confident that the woman would survive whilst we were in the operating theatre, the perspective of the patient and the relatives is completely different. This was, and remains one of the most humbling and transformative experiences in my career so far.

Although the patient's partner was thanking me for the compassionate nature in which our team dealt with the scenario, I felt his expression of gratitude was an act of compassion towards my negative state at the time. A few

weeks after this incident, I spoke to a family friend who developed a post-partum haemorrhage recently. The way she described her emotions at the time whilst facing mortality made me think that not being able to spend as much time with patients had desensitised me to their suffering. It's something that I have tried to rectify in my daily practice.

These events led to a cascade of reflections on my approach to other clinic cases. What might be a case of non-cardiac chest pain when I clerk a patient is a source of huge concern for patient and relatives for what may be a heart attack. Amid the heavy workloads and a clinician's knowledge and experience of what is truly serious or not, it is easy to forget to ask about the concerns of the patient. And to reduce a patient to their signs and symptoms alone during a busy take. I also began to appreciate that the smallest gesture or act has a huge impact on a patient and their relatives. For example, I felt that my role in the surgery was merely to hold the retractor whilst the experienced surgeons dealt with the haemorrhage. However, being in that environment meant I played a far bigger role in the patient's care in the eye of the patient's partner than I had thought. This difference in perceptions stresses the importance of acting professional and being mindful of the little things when communicating with a patient and relatives through verbal and non-verbal means.

Medicine is a tough career, and I have come to see how easy it is to lose sight of why I entered this profession in the first place. However, experiencing the gratitude of the patient's partner made me appreciate the importance of compassion on myself, and those around me. Trialling times in my life as a FY1 had unfortunately led to a sense of existential unease. This unease was countered by exploring my spiritual beliefs that put 'rahma', mercy and compassion at the centre of leading a righteous and fulfilled life, as well as establishing closer ties with my family and wider support network which was paramount to my healing. To be able to recognise this, and to reconnect with it has led to me making more of a conscious effort to connect with the patients I intend to serve, and my colleagues.

Furthermore, I have also come to understand the value of 'gratitude' in a scriptural sense, for Allah states in the Quran that, 'If you are grateful, I will increase you.' To receive gratitude and to becoming mindful of Allah's mercy in bringing ease after hardship in my life has made me appreciate the importance of practising gratitude to others and my supplications. Moreover, a sense of gratitude for the blessings around me has made me renew my sense of purpose in life through introspection, as I look to develop a career in tackle health inequalities and improve the lives of populations through Public Health and Family medicine. A lot of this work will involve advocacy to encourage people to change their health behaviours. However, had it not been for the insights I had, I wouldn't have been able to see the wisdom of the Prophetic saying, "A person who

teaches goodness to others while neglecting his own soul is like an oil lamp, which illumines others while burning itself out.³"

As I look back on these events, I find it fitting that my deepened understanding of compassion and gratitude in a spiritual sense came from a case that involved motherhood, and the profound love and mercy it is associated with. Reflection on Allah's signs and blessings has been a powerful tool to transform my perspective on life as a doctor and believer, and I would recommend my colleagues with similar struggles in the healthcare profession to contemplate on the hadith, 'An hour of reflection is better than seventy years of worship,' to find lasting solutions to their problems.

References

1. The Oxford Encyclopedia of the Bible and Gender Studies [Internet]. Google Books. 2018 [cited 13 August 2018]. Available from: <https://books.google.co.uk/books?id=ZU-nBAAAQBAJ&pg=PA76&lpg=PA76&dq=r-h-m+womb+hebrew&source=bl&ots=Y2v9fuw0o-&sig=HFvqZUuO0aRgR1RB48SF0Kw9Mt8&hl=en&sa=X&ved=2ahUKEwJy94ik3ercAhXPRMAKHUmrDzIQ6AEwBXoECAQQAQ#v=onepage&q=r-h-m%20womb%20hebrew&f=false>
2. Tzortzis H. Why Love God [Internet]. Hamza Andreas Tzortzis. 2018 [cited 13 August 2018]. Available from: <http://www.hamzatzortzis.com/why-love-god/>
3. Yusaf, M. (n.d.). Inside the soul of Islam.