## Religious, Cultural and Legal Barriers to Organ Donation: The Case of Bangladesh

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**Abstract:** There is a substantial shortage of organs available for transplantation in Bangladesh. This has resulted in the commodification of organs. This study analyzes the religious, cultural, and legal barriers to organ donation in Bangladesh. It is based on the examination of available literature and primary sources i.e. religious decrees and opinions of religious leaders of faith traditions, and the Bangladesh Organ Donation Act, 1999. The literature was retrieved from databases, such as PubMed, BioMed, and Google Scholar using the key words: organ donation in Islam, organ donation in Bangladesh, organ donation and religions. The study found that although many Islamic scholars accept organ donation, both living and cadaveric, under some conditions, some Bangladeshi Muslim clerics oppose donation. They argue that organ retrieval violates the sanctity of the human body and retrieval of organs may harm a living donor or lead to death, and organ donation may encourage the commercialization of body parts. Both commercialization and harming oneself are considered sins. Thus, the divergent views of Muslim clerics are a major barrier to organ donation among the Bangladeshi Muslims. Cultural and social factors also have a negative impact. Most people desire to be buried with their bodies intact. Although the Bangladesh government promulgated the Bangladesh Organ Donation Act, 1999, and amended it in 2018, it restricted donors and recipients to members of the extended family, which also reduced the donor pool. This study argues that the Muslim Orthodox clerics' stand against organ donation and other cultural and legal issues are the major obstacles to organ donation in Bangladesh.

**Key words:** Organ donation, organ transplantation, cadaveric donation, Islamic bioethics

**Introduction:** Organ donation is one of the major developments of medical sciences in the 21<sup>st</sup> century. Organ transplantation is a life-saving process for people who are suffering from organ failures. Although organ donation and transplantation can be a new hope to dying patients, the attitude and acceptability of organ donation and transplantation vary according to religious,

cultural, and legal issues. These diversities in legal, cultural, religious, and traditional concepts regarding organ donation and transplantation restrain its acceptability and create a lack of willingness to organ donation among the people of Bangladesh. Therefore, comparing to other countries, Bangladesh lacks behind in organ donation and transplantation. Although organ donation is

increasing steadily in Bangladesh, still this medical practice is stuck in its primary stage of development <sup>1</sup>. Thus, the question arises what are the reasons behind this situation even after knowing that saving a life is a virtuous act? Do people know the importance of organ donation? For what reasons Bangladeshi people are not willing to donate organs even to their family members? Why is the percentage of organ donation in the country very low? Is this because of religions religious beliefs, cultural educational, social prejudices, mistrust of medical professionals or hospitals? What are the opinions of religious leaders and religious scholars of the country regarding organ donation? How do the medical authority and the government act on this very crucial issue? In this paper, we discussed only religious, cultural, and legal barriers to organ donation in Bangladesh.

Methodology and methods: This study discusses and analyzes the religious, cultural, and legal barriers to organ donation in Bangladesh. Thus, the article is descriptive and analytical. This article discusses the issue from four major religious perspectives, such Hinduism, Islam, Buddhism, Christianity in the context of Bangladesh. The article is based on examining available literature and primary sources i.e. religious decrees and opinion of religious leaders of faith traditions, and the Bangladesh Organ Donation Act (1999). The literature was retrieved from databases, such as PubMed, BioMed, and Google Scholar using the key words: organ donation in Islam, organ donation in Bangladesh, organ donation in religious scriptures.

Organ donation scenario in Bangladesh and around the world: Both living and cadaveric organ donation and transplantation very common medical practices worldwide. However, in Bangladesh, these life-saving medical procedures are not well established yet. Even, there are no actual estimates regarding life-threatening diseases and the need for organ transplantation. It is estimated that around 20 million people are suffering from kidney diseases which are about 9 percent of the country's total population, and half a million people are suffering from corneal diseases. More than 35,000 people die because of kidney failure. The yearly need for kidney transplantation is estimated at roughly 5000 <sup>2</sup>. However, only around 100 people can have kidney transplants with kidneys donated from their relatives <sup>2, 3</sup>. In 1982, the first-ever successful kidney transplantation was conducted at Bangabandhu Sheikh Mujib Medical University (then Institute of Postgraduate Medicine & Research). After that, on a limited scale, regular kidney transplantations have been continued as kidney donation continues to come from living donors, who are believed to be close relatives of kidney recipients 1. The initiative of cornea transplantation began in 1974 and the successful cornea transplantation conducted in 1984 <sup>4</sup>. To promote cornea donation challenging false perceptions and fear of donation in the society, a public awareness campaign had been extended over three decades. This has resulted in more cornea donations and transplantations in recent years <sup>2</sup>.

Concerning liver disease, one in three Bangladeshi suffers from liver disease. Compare to kidney transplants, liver transplants are a recent development and are successful The first-ever transplantation of the country was conducted in 2010 at BIRDEM Hospital 1. Although liver transplantation was started in 2010, it happens rarely because of a shortage of donations and a lack of trust of people in medical and transplant procedures. There are ten transplant centers both in the public and private sectors. Some private hospitals and charity centers such as Kidney Foundation and Centre for Kidney Disease and Urology Hospital, Square and Evercare Hospital conduct transplantation from living donors. However, mainly, in public hospitals, transplantations are performed. These centers mainly implant kidney and cornea, and bone marrow that has been introduced recently 5. This picture shows the capacity of organ donation and transplantation in the country.

Because of the shortage of organ donation and capacity for organ transplantation, each year thousands of Bangladeshis die while waiting for an organ donor and possible transplantation. This is because of an acute imbalance between the number of people waiting for transplantation and the number of organs donated. The unavailability of potential donors makes the situation worse. Although the need for organ transplantation is growing over time, the practice of organ donation is not enough in the country. In Bangladesh, laws regarding organ donation and transplantation are still confined to close family members <sup>6</sup>. Although the cadaveric transplantation is permitted in the amended

Bangladesh Organ Donation Act (1999), the donation and transplantation are limited to living donors only <sup>7</sup>. This has resulted also in the commodification of organs <sup>8</sup>.

Compare Bangladesh, organ transplantation has become a normal and familiar strategy for treating organ failure largely in developed countries. In 1984, the United States constituted the National Organ Transplant Act (NOTA) which forms a legitimate structure for organ transplantation. It assures the Organ Procurement and Transplantation Network (OPTN) as a private, non-benefit organization under government supervision, which keeps up an automated review of potential organ donors and recipients. These organ banks are formed to obtain organs and supply them for transplantation when it is needed <sup>5</sup>. In developed countries, such as the UK, a healthy adult citizen can donate organs at his or her consent at any age. In the USA, a healthy person aged between 18-70 years can donate a kidney. In Canada, a healthy person can donate a kidney, a lobe of the lungs, and a part of his or her liver if he or she wishes. Concerning neighboring countries, such as India a relative donor can donate an organ to the patient whenever it is required. A nonrelative donor can donate organs by informing the State Authorization Committee at least 24 hours before. In Sri Lanka, any healthy person can donate an organ to the patient with the consent of the Ethical Committee of the Health Ministry <sup>9</sup>. In Pakistan, if the required organ cannot be collected from the first-degree relative, an organ can be collected from a cadaveric or living non-relative donor with the approval of the Human Organ Transplant Authority under the observation of the National Monitoring Authority <sup>10</sup>.

Many Muslim countries have formulated and enacted laws and regulations on organ donation from living and cadaveric donors. For example, Egypt is the only Muslim country where no objection is recorded from Islamic scholars regarding organ donation and transplantation 11. In Saudi Arabia, both living and cadaveric donation are allowed for organ transplantation <sup>12</sup>. Among the Muslim Middle East countries, Iran has the best model for organ donation and transplantation as there is no prohibition of relative and nonrelative, and living and cadaveric donors <sup>13</sup>. Moreover, any healthy nonrelative organ donor is rewarded with a special monetary award. That's why there is no waiting list for kidney transplantation in Iran <sup>14</sup>.

Religious issues of organ donation in Bangladesh: We discussed the issue from four major religious perspectives, such as Islam, Hinduism, Christianity, and Buddhism in the context of Bangladesh.

**Organ donation in Bangladesh: an Islamic perspective:** For organ donation and transplantation, religions and religious sentiments play an important role throughout the world including Bangladesh <sup>15</sup>. No religion formally forbids organ donation and transplantation both from living and cadaveric, except some orthodox Jews Rabbis, some Muslims and Christian scholars <sup>16</sup>. Many Muslim countries, such as Saudi Arabia, Malaysia, Indonesia, Turkey, Oman, Egypt declared religious decrees (fatwas)

permitting organ donations from both living and cadaveric donors <sup>17</sup>. These countries have brain death laws and organ transplant acts, and most importantly, in these countries, the concept of brain death and organ donations are supported and approved by Islamic scholars and religious leaders of different faith traditions <sup>18</sup>. However, some South Asia Muslim clerics (scholars) and muftis (jurists) oppose organ donation — living and cadaveric — because according to them, the human body is an "amanat" (trusteeship) from Allah and it must not be dissected <sup>19</sup>.

Similar to other South Asian countries, there are opinions for and against organ donation among the Islamic scholars in Bangladesh. The cultural and social norms are blended with Islamic Religious Tradition Bangladesh. Therefore, it is difficult to make Bangladeshi Muslims understand religious issues and any other issues which are not directly discussed in the Quran and the Sunnah (the traditions of the Prophet). The problem arises because, despite many religious decrees (fatwas) from religious scholars around the world supporting organ donation and transplantation, there is a lack of agreement among Muslim scholars concerning whether organ donation is compatible with Islam <sup>20</sup>. The literature on organ donation and transplantation also demonstrates that Muslims are more likely than people of other religions to have a negative view on organ donation <sup>19</sup>. Studies also demonstrate two main concerns: first; Muslims are often uncertain whether organ donation is permissible or forbidden in Islam. and second; even in cases where Muslims believe organ donation is permissible in

Islam, this attitude does not often lead them to organ donation through actions, such as having donor cards <sup>21</sup>.

Those who don't believe that organ donation is permissible they argue that human beings are not the owner of their bodies rather they are the caretaker only 20. Referring to the Quran they argue that after being buried, human bodies will decay, but during the process of resurrection, human bodies will be resurrected with all their memories and deeds. Human organs and skin will thus bear witness against one's actions on the Day of Judgment <sup>22</sup>. The Qur'an prescribes, "And vou did not veil vourselves lest vour ears, your eyes, and your skin should bear witness against you, but you thought that Allah did not know most of what you did" (Qur'an, 41:22).

Thus, they argue that donation transplantation of organs is not allowed in Islam as it is considered an alteration to Allah's creation <sup>22</sup>. It is also stated in the Quran that "Verily we have honored the children of Adam. We carry them on the land and the sea, and have made provision of good things for them, and have preferred them above many of those whom We created with a marked preferment" (Qur'an, 17:70). They also argue referring to a statement of Prophet Muhammad (PBUH), where he stated, "breaking the bone of a dead person is like breaking it alive". Therefore, human bodies should be preserved as much as possible because the sanctity of the human body is very much important in Islam <sup>14, 23</sup>. Thus, Muslims must bury dead bodies as soon as possible.

Moreover, they argue that modern medical facilities, equipment, and treatments are not available to transplant patients in many Muslim countries including Bangladesh. Therefore, they are critics of the western biomedical practices. They believe that the main purpose of the western biomedical practices is nothing but another way of money-making <sup>22</sup>. That's why Muslim scholars are against organ donation and transplantation. These divergent views create a dilemma among Muslims who wish to donate their organs for transplantation and medical researches.

While some scholars deny the importance of organ donation and transplantation, many Islamic scholars welcome it wholeheartedly. There are different interpretations by different religious leaders, 'and 'Ulemas' (Scholars), but many of them support living organ donations under the following conditions <sup>24</sup>:

- 1. Donation should not cause a major loss to the donor's health.
- 2. A person receiving an organ should be beneficial for his/her health.
- 3. Donation should not be for money.

Scholars argue that if any question is not directly answered in the Quran and Hadith, Muslims should look for an answer in *Ijma* (consensus) and *Qiyas* (analogy). As there is no direct statement regarding organ donation in Islam, therefore, Muslims should follow secondary and subsidiary sources of Islamic Shariah. Regarding the enhancement of public welfare and the common good

(Maslahah), it is asserted by one of the significant rules of the Shariah that despite Islam forbidding the violation of the human body, necessity makes prohibited things permissible <sup>18, 24</sup>. Thus, they argue that organ donation and transplantation are permissible based on the principle of the necessity and welfare of the community or human beings. Even, there is evidence that Prophet Mohammed (PBUH) himself replanted the eve of Oatada Ibn Noman, the arm of Muawith Ibn Afra, and the hand of Habib Ibn Yasaf which were amputated in the battle of Ohood <sup>12, 24</sup>. Regarding blood transfusions, the principle of necessity allows blood transfusions from non-Muslims according to the Hanafi, Shafi, and Hanbali schools, while the Maliki school allows it if a Muslim donor is not available <sup>22</sup>. Similarly, a verse from the Quran can be cited in support of this position. The Quran says, "He has explained to you in detail what is forbidden to you, except under compulsion or necessity" (Qur'an, 16:89). This implies that 'necessity overrides prohibition'. In Islam, it is argued that one can treat oneself legally without doing any harm to human dignity and honor. That is why every legal treatment and life-saving method is permissible in Islam. The concept of altruism is encouraged in Islam. To save one's life or do well to others selflessly is always appreciated in Islam <sup>25</sup>. In the Quran, it is stated that "Whosoever saves the life of one person it would be as if he saved the life of all mankind" (Quran 5:32).

In 1992, during the Third International Congress of the Middle East Society on organ transplantation, the Grand Mufti of the Republic of Tunisia, Shaikh M. M. Sellami

said, "According to Islam a human being is not the owner of a part of his body or the whole body. In any case, organs should not be traded, but donated" and later, he added on, "I am afraid that these drug gangs could use their network overseas to start trading in human organs" <sup>16</sup>.

Maulana Abdullah Al-Maruf, a Bangladeshi Islamic scholar, referred to the decision of the OIC's Islamic Council which declared that one can donate his or her organs before or after his or her death for the welfare of the mankind. He stated that "A man, however, cannot sell his organs according to Islamic principles but he can donate...This is because human organs are highly precious in the eyes of Islam and they cannot be regarded as commercially tradable objects" <sup>26</sup>.

These positive views on organ donation by Muslims scholars are not reflected in an actual donation, because many Bangladeshi Muslims are still reluctant and hesitant to organ donation. Therefore, compared to Bangladesh with other Muslim countries, such as Saudi Arabia, Turkey, Iran, Lebanon, and Kuwait have more organ donation and transplant <sup>27</sup>. Moreover, the percentage of living kidney and liver donors in Bangladesh is less than any other neighboring country. The reasons behind these are nothing but lack of knowledge about organ donation, its process, misinterpretations of religious decrees (fatwas) of Islamic scholars by local religious leaders (imams). Moreover, this divergent view of Islamic scholars regarding organ donation is creating a dilemma among the Bangladeshi Muslims who wish to donate their organs.

Organ donation in Bangladesh: a Hindu, **Buddhist** and Christian perspectives: Hinduism supports organ donation and transplantation. The concept of daan or selfless activities has always appreciated in Hinduism. There are many verses found in Hindu scriptures that indirectly support organ donation (18). The Bhagavad Gita notes, "...it is said that the soul is invisible...knowing this you should not grieve for the body" (Chapter 2:25). Similarly, the Manusmruti says, "Of all the things that it is possible to donate, to donate your own body is infinitely worthwhile".

Interestingly, the practice of organ donation is also found in Hindu mythology. The xenotransplantation of head and neck on Hindu god Ganesha, Lord Shiva's consort, is considered a classic example of organ donation 18. Although Ganesha's elephanthead may be a mythological figure, still it makes for an intuitive concept, considering the period when Shiva Purana was inked. Moreover, in Puranic Hindu texts, dating back to 2500-3000 B.C., a vivid description of the reconstruction of mutilated noses using skin homograft is also found <sup>28</sup>. Therefore, Hindu scholars have publicly many supported organ donation for the benefits of other people. Organ donation is regarded as an integral part of living <sup>18</sup>.

In Buddhism, the process of death is considered a very important time and is treated with the utmost care and respect <sup>19</sup>. However, preserving the physical integrity of a dead body is not considered important in Buddhism. According to some Buddhist

scholars, the concept of brain death is seen to be problematic. In Tibetan Buddhism, it is believed that spiritual consciousness can stay in the body even after one's death. The departure of this spiritual consciousness is regarded as the actual moment of one's death and till then the body must be kept undisturbed. As Buddhism believes in rebirth, therefore, if any disturbance occurred to the dead body, the next rebirth can face adverse effects <sup>19, 29</sup>. However, this concept creates conflicts with the concept of generosity (Daana) or selfless giving which is one of the core beliefs in Buddhism. Thus, in this dilemma. Buddhist scholars have different opinions on organ donation. Some scholars entirely oppose cadaveric donation while others leave it to individual choices <sup>18</sup>. In other words, in Buddhism, the donation is viewed as a matter of individual choices <sup>30</sup>.

Those who support organ donation consider it a valuable opportunity of generosity on several levels. First, to donate one's body or parts for research or transplantation is a unique way to detachment to one's own body. Second, to give priority to another person's welfare above one's interest is an excellent expression of the bodhisattva ethics of compassion or love. Third, to donate one's organs with an intention to benefit others will bring huge benefits in future lives, enabling one to obtain a blessed rebirth and future opportunities for Dharma practice; if donations are dedicated to the enlightenment of all living beings, the merits are immeasurable <sup>31</sup>.

Christianity generally supports organ donation and transplantation. Most Anglican,

Catholic, and Protestant scholars find organ donation as an act of selflessness, thus, they approve organ donation and transplantation <sup>29</sup>. In the New Testament, several instances of homologous transplantation are found that go back to the 1st century A.D.. For example, Jesus Christ restored a servant's ear which was severed by Simon Peter's sword in a battle. Besides, it is also mentioned in the New Testament that tortured and mutilated Saint Agatha's breast had been implanted again by Saint Peter, and Saint Mark had fixed a soldier's battle-amputated hand <sup>28</sup>.

Pope John Paul II also supports organ donation publicly <sup>18</sup>. Former Pope Benedict XVI always carried his donor card. Regarding organ donation, Pope Benedict XVI viewed that an organ donation is an act of compassion that is morally permissible if it is free and voluntary. He also said that organ transplantation is ethically acceptable with the consent of the donor and without undue risk of the donor. For cadaveric donation, the death of the donor must be fully confirmed <sup>16</sup>. He noted:

I offer my organs to help whoever is in need; it is simply an act of love. But, above all, it means - I repeat - to carry out an act of love toward someone in need, toward a brother in difficulty. It is a free act of love, of availability, that every person of goodwill can do at any time and for any brother. That is all. In my capacity, I do not allow myself to judge the law of any State. I do not judge laws. I only say that to give one's organs spontaneously for transplants, in full awareness and full

knowledge means to give expression to a true, deep act of love for one's neighbor. <sup>16</sup>

Organ donation in Bangladesh: social and cultural barriers: The shortage of organs for transplantation makes it important to understand why some people are reluctant to donate their organs. There are many causes why certain groups are less likely to give consent to organ donation. Among these causes, both social and cultural issues play an important role, especially in developing and developed countries, such Bangladesh <sup>32</sup>. There are some social obstacles prejudices among and Bangladeshi regarding organ donation, which hamper organ donation. Firstly, most Bangladeshi desire to be buried with their bodies intact, thus they are not willing to donate organs posthumously. This belief is partly associated with religious conviction as they believe that their bodies belong to Allah, therefore, they cannot support to dissect human bodies<sup>3</sup>.

Secondly, most people fear that they may die during surgeries or after surgeries if they go under surgery for organ retrieval for donation as they lack knowledge on the process of organ donation <sup>3</sup>. Thirdly, fear of mutilation is another misconception concerning organ donation as they believe that if a person wants to donate an organ, other organs might also be taken. This misconception can be corrected by informing donors or relatives of cadaveric donors that only organs identified for donation will be retrieved from donors <sup>29</sup>. Fourth, family pressure plays a negative impact on the donation, particularly on its

earning members. In most cases, families do not allow an earning member of a family for donations because they are afraid that the person might not be able to earn livelihood if he or she donates an organ <sup>33</sup>. Also, married women are always discouraged by in-law's families to donate organs to members of their paternal families. Fifth, they fear that organs will be sold or used by rich people if they donate organs. Studies claim that the system of organ allocation to waiting list patients is not fair all the time. Wealthy patients are moved up the waiting list faster than poor patients during the transplantation of organs <sup>34</sup>. Sixth, organ trafficking is another fear that forbids people from organ donation as it includes unethical doctors, medical staff, and the rich people of Bangladesh. Seventh, commercial dealings with organs are also a major barrier to organ donation 8. Eighth, people's mistrust of hospitals and health care professionals play also a negative role in donation especially when it comes to overseeing sick patients in hospitals, and declaring brain death in Bangladesh. Ninth, the cost of the transplantation process and medicines is so high therefore poor people cannot afford it. As the whole process is very costly, that is why most of the families avoid organ transplantation in the country. Lastly, there is also a scarcity of transplantation centers with minimal cost and modern facilities in Bangladesh, which is another major barrier to organ donation <sup>1</sup>.

The problem of biopiracy, a form of bioviolence where developed countries collect cells or tissues illegally from the marginalized populations or developing countries without any consent or fair

compensation or agreement, is another major barrier to organ donation. These illegal acts are done for many scientific research studies, such as AIDS, Polio, Cancer, Gene mapping and so on, and Bangladesh is a good market place in this regard <sup>8</sup>.

These social and cultural barriers and prejudices and the shortage of modern transplant technologies are causing damage to this life-saving procedure in Bangladesh. Therefore, the percentage of living organ donation, and cadaveric donation, which is yet to start in Bangladesh, is very low compare to many other Muslim countries and its neighboring countries.

Organ donation in Bangladesh: legal issues: Bangladesh Organ Donation Act, the laws first on organ donation transplantation, was passed in 1999 where the government of Bangladesh ensured legal procedures for the collection, preservation, and legal use of human organs and transplantation. Although this act allows two types of donors, living and cadaveric, the cadaveric donation was not in practice in all these years. Besides, the donor lists in 1999's Act were confined only to legal successors, such as husband, wife, father, mother, sister, brother, adult son, daughter and blood-related uncle, aunt as prospective donors <sup>7, 35</sup>. However, in 2018, the amendment of this Act allowed grandparents, grandchildren, and first cousins as potential donors. In this amendment, a national cadaveric panel is proposed to be established to monitor the transplantation process along with providing facilities to doctors for the transplantation process. If any accusation is found regarding

organ donors and recipients, then the individual will be punished with two years of detainment or a Taka of 5 lakh fine or both. If any specialist is found to be involved with the damage of the law his or her enlistment will be dismissed from the Bangladesh Medical and Dental Council. Again, if any institution is found denying the law, its registration of the transplantation center will be canceled by the authority and will be fined <sup>7</sup>. This amendment is truly welcomed and also is praised by the medical authority of Bangladesh <sup>5</sup>.

However, the Act of 1999 is amended in 2018, its scope is still limited. The age limit is decided from 65-70 years both for donors and recipients, although the average life expectancy in Bangladesh is higher than this age limit <sup>5</sup>.

Although the volunteer donors are allowed for kidney transplantation, for other transplantations, the donor list is still restricted within a family and close relatives <sup>7</sup>. Therefore, in 2019, the High Court of Bangladesh gave a verdict regarding this issue where volunteer donors, who are not relatives to patients, are permitted to organ donation. The verdict was announced by the High Court of Bangladesh when a petition is filed regarding kidney transplantation where it clearly said not only the proposed 28 members from the patient's family but also voluntary donors, non-relatives of patients, can also donate his or her kidney willingly for transplantation. It also added that a thorough check-up of both the physical and mental health of the volunteer is required before donation. Regarding the verdict,

petitioner's counsel, Barrister Rashna Imam said that sometimes family members do not want to be a donor and sometimes they unmatched with the patient and in that situation, a volunteer donor is a must for saving one's life, under a monitoring process <sup>36</sup>

However, for cornea, skin, tissue, and bone marrow donation close relatives are not required. The law allows the donation and retrieval of major transplantable organs. The infrastructure of the ICU, brain death committee, transplant coordinator, and the national committee for cadaveric organ transplantation are well defined in the law. However, there is no central monetary transaction rules and no clear guidelines on organ allocation system according to the law. Voluntary donation during one's lifetime (opt-in) has also not been discussed in the law. Organ procurement organization and audit system for transplantation are not mentioned. Moreover, there is no system for compulsory referral of all possible cases of brain death in hospitals 7. Besides, it is needed to introduce presumed consent which has been effective in many countries including some Muslim countries <sup>5</sup>.

As the Act is still very restrictive, therefore, when close relatives are not found for donation, the rich people buy organs from the poor donors introducing them as close relatives. And most of them often go to the neighboring countries for treatments and transplantations which are also a financial loss to the economy of Bangladesh <sup>8</sup>. In an interview regarding the issue, Gonoshasthaya Kendra trustee, Dr. Zafrullah Chowdhury,

said that in Iran and Canada, only regulatory bodies decide whether donors should donate organs to a patient or not. He also added that rich people were getting kidney transplanted in India, Sri Lanka, Singapore, and the US; thus, the Bangladesh government is losing foreign currencies worth of Taka 8,000 crore every year <sup>37</sup>.

Therefore, it is recommended that the government of Bangladesh should allow voluntary donation so that organ trafficking organ commercialization can restricted. However, it is argued that allowing nonrelative donors into the donor pool may cause more harm than benefits and it would be an unethical practice while more than 20% of people still live below the poverty line. Allowing unrelated donors to organ donation in Bangladesh will coerce the poor people into selling their organs to rich patients <sup>6</sup>. However, the illegal commercialization of body parts is being practiced around the world, therefore the government must stop the commodification of organs by enforcing laws and introducing stern punishments <sup>38</sup>.

Organ donation in Bangladesh: a way forward: Although Bangladesh has experienced significant improvement in cornea donation, the donation of other organs is still lacking. The following measures might be taken to increase organ donation and transplantation:

1. There should be a comprehensive awareness program regarding the importance of organ donation. The government, non-government organizations, media, public

- representations, religious scholars, doctors, nurses, all stakeholders should work together to make the awareness campaign a success.
- 2. A 'National Coordination Committee' should be introduced by the government comprising all concerned stakeholders to monitor organ donation and transplantation.
- 3. Enactment of law against illegal organ trafficking.
- 4. Transplant facilities should also be prioritized in government hospitals so that poor people can get the benefit of organ donation.
- 5. Manpower training, subsidy for the organ donors for ensuring post-operative care and needy recipients for transplantation, establishing a central organ registration system, introducing a "donor card" could be introduced.
- 6. An organized training program is needed to prepare manpower for organ retrieval and transplantation.
- 7. There should be a scope of organ donation by all healthy relatives or nonrelatives like those in developed countries. The age limit for healthy donors and sick recipients should be raised to a standard level.
- 8. All organ donors should be given fixed compensation and proper treatment and other facilities on a priority basis if necessary.
- 9. Physicians involved in organ donation and transplantation should be safeguarded, and if any physician does not make medical negligence in

- transplantation procedure should be not discharged.
- 10. There should be required doctors, nurses, and technical supports for the smooth functioning of organ transplantation.

**Conclusion:** Organ donation and transplantation are major parameters to the development of the health care system of a nation. Most nations are making progress in practices of organ donation transplantation and are offering hope of new lives and survival benefits to their people. As Bangladesh cannot afford to lag in organ donation and transplantation, all the concern stakeholders, particularly the government, physicians, community, and religious leaders should take organ donation and transplant positively, and treat religious, cultural, and legal issues from positive perspectives for a life-saving opportunity and the betterment of human beings. Moreover, it is not people who do not want to donate their organs but lack of mechanisms to facilitate donation are major barriers to organ donation in Bangladesh. Therefore, the practice of organ donation in Bangladesh should be increased under proper guidelines and surveillance as soon as possible.

## References

- Ali M. Organ Transplantation in Bangladesh-Challenges and Opportunities. Ibrahim Medical College Journal. 2012;6(1):i-ii.
- Rahman M, Mahmood S. Status of Organ Donation and Transplantation in Bangladesh. Transplantation. 2017;101:S30.
- 3. Billah MM, Farzana H, Latif A, Mitra P, Chowdhury TA, Rahim MA, et al.

- Knowledge and attitude of Bangladeshi physicians towards organ donation and transplantation. Bangladesh Critical Care Journal. 2016;4(1):23-7.
- 4. Haider S. The quest for corneas. Star Weekend Magazine, . 2007.
- 5. Sardar NN. The analysis of the perceptions of health professionals toward organ donation and transplantation in Bangladesh. 2018.
- Siraj MS. Why Is Family-Oriented Organ Transplantation Policy and Practice Necessary for Bangladesh? Bangladesh Journal of Bioethics. 2020;11(1):1-9.
- 7. Bangladesh Organ Donation Act. In: Law Mo, editor. Dhaka: The government of Bangladesh; 1999.
- 8. Moniruzzaman M. "Living cadavers" in Bangladesh: bioviolence in the human organ bazaar. Medical anthropology quarterly. 2012;26(1):69-91.
- 9. Chowdhury Z, Karim T. Limitations and remedies amended the human organ transplantation act. Dhaka: Bangladesh. . The Business Standard. 2019.
- 10. Moazam F, Jafarey A. Pakistan's experience with kidney transplantation and trade: a call for international solidarity. Indian journal of medical ethics. 2014;11(3):156-62.
- 11. Budiani D. Facilitating organ transplants in Egypt: An analysis of doctors' discourse. Body & Society. 2007;13(3):125-49.
- 12. Albar M. Organ transplantation: a Sunni Islamic perspective. Saudi Journal of Kidney Diseases and Transplantation. 2012;23(4):817.
- 13. Ghotbi N. The ethics of organ transplantation in the Islamic Republic of Iran. Eubios Journal of Asian and International Bioethics. 2013;23:190.
- Alkhawari FS, Stimson GV, Warrens AN. Attitudes toward transplantation in UK Muslim Indo-Asians in west London. American Journal of Transplantation. 2005;5(6):1326-31.
- 15. Daar AS. Ethics of xenotransplantation: animal issues, consent, and likely transformation of transplant ethics. World journal of surgery. 1997;21(9):975-82.

- 16. Bruzzone P, editor Religious aspects of organ transplantation. Transplantation proceedings; 2008: Elsevier.
- 17. Ghods AJ. Current status of organ transplant in Islamic countries. Exp Clin Transplant. 2015;13(1):13-7.
- 18. Oliver M, Woywodt A, Ahmed A, Saif I. Organ donation, transplantation and religion. Oxford University Press; 2011.
- 19. Lo C-M. Deceased donation in Asia: challenges and opportunities. Liver transplantation: official publication of the American Association for the Study of Liver Diseases and the International Liver Transplantation Society. 2012;18:S5-7.
- 20. Sharif A. Organ donation and islam—challenges and opportunities. Transplantation. 2012;94(5):442-6.
- 21. Rasheed SA, Padela AI. The interplay between religious leaders and organ donation among Muslims. Zygon®. 2013;48(3):635-54.
- Siraj MS. Organ Donation for Transplantation in Bangladesh: Policy, Practice and Ethics: City University of Hong Kong; 2016.
- 23. Mousavi SR. Ethical considerations related to organ transplantation and Islamic Law. International Journal of Surgery. 2006;4(2):91-3.
- 24. Albar M. Islamic ethics of organ transplantation and brain death. Saudi Journal of Kidney Diseases and Transplantation. 1996;7(2):109.
- Ebrahim AFM. Organ transplantation: contemporary Sunni Muslim legal and ethical perspectives. Bioethics. 1995;9(3):291-302.
- 26. Transplant of kidney from brain-dead to begin soon. The Daily Star. 2019.
- 27. Shaheen F, Souqiyyeh M, editors. Increasing organ donation rates from Muslim donors: lessons from a successful model. Transplantation Proceedings; 2004: Elsevier.
- 28. Chawla AS, Chandra R, Agarwal Y. Tissue and organ transplantation: Myths, miracles, and triumphs. Astrocyte. 2014;1(2):144.
- 29. Robson NZMH, Razack AH, Dublin N. Organ transplants: ethical, social, and religious issues in a multicultural society.

- Asia Pacific Journal of Public Health. 2010;22(3):271-8.
- 30. Keown D. Buddhism, brain death, and organ transplantation. Journal of Buddhist Ethics. 2010;17:1-34.
- 31. Tsomo KL. Into the jaws of Yama, lord of death: Buddhism, bioethics, and death: SUNY Press; 2012.
- 32. Jafarey A, Nagral S. Towards deceased organ donation in Asia: negotiating the challenges. Indian J Med Ethics. 2014;11:137-8.
- 33. Irving MJ, Tong A, Jan S, Cass A, Rose J, Chadban S, et al. Factors that influence the decision to be an organ donor: a systematic review of the qualitative literature. Nephrology Dialysis Transplantation. 2012;27(6):2526-33.
- 34. D'Alessandro A, Peltier J, Dahl A. The impact of social, cognitive and attitudinal dimensions on college students' support for organ donation. American Journal of Transplantation. 2012;12(1):152-61.
- 35. Rahman K, Osman M, Mahmud S, Rahman M. The legal guideline for organ transplantation and therapeutic tissue removal. Journal of Dhaka Medical College. 2009;18(2):174-7.
- 36. Rahman M. Kidney donation outside close relatives for emotional reason valid. Dhaka Tribune. 2019.
- 37. HC allows organ donation also to known people. New Age. 2019.
- 38. Board S. Ethical incentives—not payment—for organ donation. N Engl J Med. 2002;346(25).

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