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ANALYSIS OF THE FACTORS CAUSING THE DECREASE OF ORGAN DONATION IN MALAYSIA

i,*Siti Nur Hidayah Rosli & iAmalina Ahmad Tajudin

Faculty of Syariah and Law, Universiti Sains Islam Malaysia (USIM), 71800, Nilai, Negeri Sembilan, Malaysia

*(Corresponding author) e-mail: snurhidayah894@gmail.com

ABSTRACT

Organ donation has emerged as a critical issue in recent times, particularly due to the ongoing shortage of available organs. This shortage is largely attributed to the low percentage of individuals pledging to donate their organs. As a result, the insufficient number of organ donors leads to a significant shortage of organs for transplantation. Organ donation remains a vital and effective treatment method for patients suffering from end-stage organ failure. The demand for organ transplants has grown substantially, driven by the success of numerous transplants made possible by advancements in medical technology. However, a severe organ shortage could lead to more individuals being placed on transplant waiting lists, with many dying while awaiting a transplant. This study seeks to investigate the factors contributing to the decline in organ donation pledges. Additionally, it explores the significance of organ donation from an Islamic perspective and examines the relevant Fatwas in Malaysia. The study will also identify the different types of organ donors and propose potential solutions to address the underlying causes of this issue. The findings aim to provide insights into improving organ donation rates, offering recommendations for policies and strategies to promote organ donation in Malaysia.

Keywords: Organ donation, donors, Islamic perspective, factors, solutions

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Introduction

Since 1976, organ donation has been a common practice in Malaysia; therefore, this is not a recent concern. In reality, the Malaysian public is coming to accept organ donation as a way to support people in need of new organs so they can live longer. Organ donation is a life-saving and life-changing medical procedure in which a donor's organs are removed and transplanted into a critically ill patient or someone who is nearing organ failure. Because organ donation can save a life, it is regarded as a noble deed. It cannot be denied that the implementation of organ donation in Malaysia can save thousands of other people's lives, as organ transplants are the only hope for those patients to live a healthy life again. In addition, Allah SWT has commanded Muslims to look for medical treatments for illnesses, and until absolutely necessary, we must treat with halal materials. And this coincides with the following hadith:

From Abu Darda' RA, the Prophet SAW said:

Translation: "Allah has sent down both the disease and the cure, and He has appointed a cure for every disease, so treat yourselves medically, but use nothing unlawful".

(Narrated by Abu Daud, 3874)

Even with today's advanced technology, organ donation and transplantation rates are thought to be comparatively low. There are still a large number of people who refuse to give their organs to others in need, which will contribute to the organ shortage. That means that when the number of individuals willing to donate organs is insufficient to meet the demand for transplantation, it leads to a shortage of organs. Many nations are deeply concerned about the organ shortage, and our country is not exempt from the problem of organ donation. The term "organ shortage" describes the situation where there are not enough organs available for transplantation to satisfy the demand for organ transplants. As of 2023, Malaysia has 34,308,525 residents. Despite having a sizable population, Malaysia is among the nations with the lowest rates of organ donation. Dr. Zaliha Mustafa, Malaysia's Minister of Health, has demonstrated that the country's organ donation rate remains in the top ten lowest globally (Berita Harian, 2023).

There is one of the departments at Hospital Kuala Lumpur that has conducted organ donor pledge registrations since 1997, and it is known as the National Transplant Resource Centre (NTRC). This department is also responsible for the implementation of the organ donation program in Malaysia. With the existence of this website, we can know data about organ donation and transplantation statistics in Malaysia every year. As for statistics by the National Transplant Resource Centre (NTRC), up to November 2023, the current active total number of organ donor pledges is 29,910. A total of 9,941 people are on the waiting list, of whom 9,542 are for kidneys only. From the statistics, it showed that there is a significant difference between the number of patients on the transplant waiting list, which is 9,941 people, compared to the number of organ donors after death, which is 876 people.

The purpose of this study is to ascertain and evaluate the contributing factors behind Malaysia's declining organ donation rates. Additionally, this study covers the fatwas based on Malaysia as well as organ donation from an Islamic perspective. Describe the different kinds of organ donors as well. Finally, offer some recommendations for mitigating these factors and raising the transplant and organ donation rates in Malaysia.

Problem Statement

Malaysia is one of the countries that is no exception to the dilemma of organ donation. In fact, many awareness campaigns about organ donation are organized in Malaysia, but the number of Malaysians who register as organ donors is not that large. The rate of organ transplantation in Malaysia is the lowest compared to those who need organs, and the population of Malaysia in 2023 was 34.3 million (Worldometer, 2024). According to the statistics released by the official website of the National Transplant Resource Centre (NTRC), a total of 29,910 are the current total number of organ donor pledges until November 2023 (Kementerian Kesihatan Malaysia, 2023). It is a small number compared to the number of organ donation pledges last year (2022), which were 56,883 (Derma Organ, 2022).

Therefore, this study is to explain organ donation from an Islamic perspective and its fatwas in Malaysia about whether organ donation is allowed or not. Next, this study will also identify the types of organ donors. In addition, this study also focuses on analyzing and listing the factors that can be the cause of the decrease in organ donation statistics in Malaysia. Finally, this study will also propose some recommendations, solutions, and measures to increase the rate of organ donation and overcome the statistical decline in organ donation in Malaysia.

Research Methodology

In order to gather information about organ donation and transplantation in Malaysia, the researcher used a qualitative approach that included desktop and library research. The researcher examined books, journal articles, the holy Quran, hadiths, and official websites of the authorities. The researcher also looked for definitions, information on the *hukm* of organ donation from an Islamic perspective, Malaysian Fatwas, factors that contributed to the decline in the country's organ donation rate, and, finally, suggestions for increasing the percentage of organ donation rates and pledges. Additionally, the researcher examined some organ donor data and statistics using links to the National Transplantation Resource Center's (NTRC) official website. Lastly, the researcher conducted an interview with a lecturer who specializes in medical law, Dr. Farah Salwani Muda @ Ismail. So, from this interview, the researcher obtained an analysis of the factors that are the cause of the lack of organ donation in Malaysia.

Literature Review

In a research article by Norazlina (2015), "Etika di dalam Pemindahan Organ: Kajian dari Sudut Agama Islam" this article discusses the history of organ transplantation in Islam and the hukm of organ donation. The researcher focuses on the problems of ethics and Islamic legal authority that do not support organ donation, as well as Islamic law that supports organ transplantation. With this, the researcher has listed some opinions that can support his questions related to the law of organ donation. Among the opinions that do not support organ donation is that Islam forbids people to seek destruction and obligates them to eliminate all harm. In addition, Islam does not allow the torture of corpses and prohibits the act of buying and selling organs. Next, for the supporting opinion, firstly, Allah SWT does not make it difficult for Muslims to apply principles when two harms collide. Lastly, organ donation is allowed when permission or consent is obtained from the donor, and Islam emphasizes the value of charity and love for human beings.

According to Farah Salwani (2011), in her article, "The Organ Shortage Crisis in Malaysia," she discussed the scenario of organ donation in Malaysia and the factors causing the organ shortage crisis. Organ donation in Malaysia was not compulsory for the people, as Malaysia practices an opt-in system in which individuals took the initiative to donate their organs after death and voluntarily registered themselves as potential organ donors. Involvement in organ donation was based on a person's willingness to donate, so if the number of people donating their organs was small, then it would lead to a shortage of organs. The researcher also explains that Malaysia has a low number of donors despite having a large population of people, even though the implementation of organ donation is known to everyone. The main factor that causes organ shortages is rejection from the family, and it is the main barrier affecting the number of actual donors in Malaysia. In this study, the researcher also proposed a solution to overcome this problem by legally amending the law in Section 2(2)(b) of the Human Tissues Act 1974 and by promoting organ donation through education and media.

According to the article "Hukum Penggunaan Organ Hasil Donor (Transplantasi Organ) Menurut Pandangan Islam" by Fathiyyah Nur Islam et al., (2023), the preparation of this article aims to find out the Islamic view on organ donation and its use according to the study of the Qur'an, Hadith, and the study of scholars, as well as to answer the legal status of organ donation and body tissue in Islam. Hereby, the researchers underline that transplantation of organs and tissues to other people is allowed with the following provisions: firstly, this treatment will be carried out when there is an urgent need and is justified according to sharia. Secondly, there is no element of abuse for donors due to the removal of organs and body tissue. Thirdly, there are no other medical efforts available for healing other than transplantation. Next, organ donation is intended to help each other and is not commercial in nature, and lastly, there is consent from the prospective donor.

Next, organ shortages have grown to be a big worry in many nations, including in Malaysia, according to the report "Low Organ Donation Rate in Malaysia: A Survey" by Makmor Tumin, Abdillah Noh, Kok Ng, et al., (2014). The aim of this research was to examine the factors that contribute to Malaysia's low rate of organ donation. Respondents to a survey that the researchers performed came from Malaysia's three major ethnic groupings. The respondents' continued disinterest in organ donation was impacted by two things: a lack of knowledge and a lack of trust. Then, they offered some recommendations on how to deal with this issue, like putting the opt-out consent policy into place. In addition, arranging campaigns that cater to the cultural, social, and religious preferences of the target populations may help boost the number of pledges made for organ donation and carry out suitable public and hospital staff education campaigns on the advantages and necessity of organ donation.

According to Akhil, Syamel Aswan et al., (2012), in the study titled "Legal and Ethical Issues Arising in Organ Donation and Transplantation," the Human Tissues Act of 1974 was the only law that controls the practice of organ donation and transplantation in Malaysia. Consent for both live and cadaveric donors is not fully covered by the statute. Additionally, it makes no mention of the kinds of tissues and organs that can be donated. The researchers noted that in order to make improvements to the current statute, a reference to the Human Tissues Act of New South Wales 1983 must be made. A revision of Malaysia's opt-in system and a discussion of the permissibility of organ donation will be among the topics covered. The commercialization of organs and the purchasing and selling of organs, which have a detrimental effect on moral principles, will also be discussed. Finally, the researchers believed that by discussing legal and ethical issues, this study would enhance Malaysia's current legal framework and raise public awareness.

Based on the study by Laily Rahmina et al. (2023), titled "Transplantasi Organ Tubuh Manusia dalam Perspektif Etika Kedokteran dan Agama Islam," the researchers talk about the meaning of organ transplantation and its history. In this study, the meaning of transplantation is a series of medical procedures for the transfer of organs and tissue from the human body originating from one's own body or another person's body in the context of treatment to replace organs or organ tissue that are not functioning properly. The researcher also mentioned that in medical ethics, organ transplantation can be done if there is an indication that requires the organ to be transplanted, and it cannot be done randomly. Furthermore, this study also states that there are differences regarding the law of organ transplantation in Islam. First, organ transplantation is permitted based on al-Qardhawi's opinion, which allows organ transplantation because it provides important benefits to others without causing suffering to the donor. Second, the law of organ transplantation is not allowed based on the opinion that human beings in this world must be protected for their existence. Finally, the researcher emphasized that organ transplantation is allowed on the condition that it does not cause harm or loss to the people involved.

An article titled "Dead Donor: A Failure of the Opting-In System in Malaysia" by Loh Ing Hoe and Tan Xui Shan (2016) mentioned that the system of registration as an organ donor in Malaysia and Australia is based on the concept of the opting-in system. The meaning of the opt-in system is that consents from both the donor (during his or her lifetime) and the agreement and consent of his or her family members (upon the death of the deceased) have to be obtained before organ removal procedures can be initiated and carried out. In other words, the deceased family members or spouse have a right to resist, decline, or object to the procedure of an organ or tissue transplant, despite the fact that there is a donor's personal consent. The researchers stated that Singapore practices a different system, which is the opt-out system, also known as presumed consent, by introducing the Singapore Human Organ Transplant Act 1987 (HOTA). Under this act, all citizens and permanent residents with an age above 21 years of sound mind are presumed to be organ donors, unless that person opts out or chooses not to be involved in or take part in organ donation and transplantation. It cannot be denied that implementing an opt-out system in Singapore will increase the number of organ donors. Lastly, the researchers highlight that introducing the presumed consent system, which is opting out, might be a good solution to avoid the low donation rate in Malaysia, and this implementation should be subjected to an intensive study or review conducted by the legislature.

According to Nazni Noordin et al. (2012), in the article "The Malay Dilemma on Organ Donation in Malaysia," organ donation among the world community today is not a new phenomenon, and it is considered a noble act. In this study, the researchers discussed how the statistics show that the Malays in Malaysia are the least likely to sign up for organ donation, even though they are the largest ethnic group in Malaysia. There are three factors that influenced them, which are religion, awareness, and perceptions or views on organ donation willingness among the Malays. But only two significant factors contributed to the main question of why the Malays shy away from organ donation: religion and perception. Then, the researcher recommended that a comprehensive discussion among religious leaders on changing the perception and explaining the laws of religion on the issue of organ donation be carried out continuously in various mediums so that the awareness of the Malays in organ donation can be fully utilized for the benefit of everyone.

An article titled "Organ Transplantation in Malaysia: A Need for a Comprehensive Legal Regime" by Dr. Puteri Nemie Jahn Kassim (2005) discussed the inadequacies of the existing Malaysian Human Tissues Act 1974, which has also contributed to the problem of organ shortage. The words "tissue" and "person lawfully in possession of the body" are not defined under this act, and there is also no articulation of a hierarchy of relatives who are deemed the next of kin. Therefore, the researcher suggests that the system of opting out should be considered in Malaysia, where every individual is presumed to be an organ donor unless he or she registers and raises an objection. Other than that, continuous, intensive public education and counselling must be carried out to increase the organ donation rate in Malaysia. So, a nationally coordinated system must be in place to ensure the effectiveness of identifying potential donors and recipients.

Last but not least, this study was carried out to determine the degree of understanding and acceptance of organ donation and transplantation among university students, based on a previous study by Nur Insyirah Hamdan and Mesbahul Hoque (2021) titled "Understanding and Accepting of Organ Donation Among the Students: A Case Study." 52 students in total successfully completed the survey that they administered. According to the survey, all of the students have a solid awareness and comprehension of organ donation. Subsequently, based on the survey, the researchers have identified 49 students who have not yet made a vow to donate their organs, and only 3 have done so. The study's conclusions demonstrated that 38 people were willing to make new organ donation pledges, despite the small proportion of students who had previously committed to organ donation. Fourteen pupils chose not to donate their organs in the meantime. This resulted from their lack of confidence and their perception that organ donation and transplantation were scary processes. Students also had to overcome familial disapproval and ignorance in order to fulfil their vow to become organ donors. Based on the survey's results, the researchers came to the conclusion that while a greater number of students knew and approved of organ donation and transplantation, some students chose not to participate because they were either unsure of the facts, their families objected, or they lacked confidence.

Findings and Discussion

Organ donation based on the Islamic perspective and its fatwas in Malaysia

Islamic perspective

The legal procedure of granting consent for one's own organ to be removed and transplanted into another person, either during the donor's lifetime or after death, with the donor's next of kin's consent, is known as organ donation. Organ transplantation as a kind of treatment is not specifically mentioned in the Quran or the Sunnah of the Prophet SAW. This is because organ transplantation is still a relatively new field of medicine. The preservation of life (*hifz nafs*) is one of the principles of *Maqasid al-Shari'ah* (Abdul Shukor et al., 2024; Alias et al., 2024; Al Jufri et al., 2021). A fatwa regarding this method of organ transplantation was issued based on Shariah principles, which include the duty to adopt the least damaging way, overcome prohibitions, and treat harm with diligence.

Organ donation is also supported by the majority of famous contemporary scholars around the world. Among them is Prof. Dr. Yusuf Al-Qaradhawi. This Islamic scholar said that donation and transplantation of organs from living, or deceased persons must be done in a moment of emergency. This method of treatment also needs to be done on the condition that it does not cause great harm to the

donor or the person who has rights over him. In Islam, organ donation and transplantation are generally seen as charitable acts known as "noble giving" or "sadaqah jariyah". Dr. Yusuf al-Qaradhawi thinks that people who donate organs will be given a great reward by Allah because the act of donating organs is included under sadaqah jariyah (Derma Organ, 2015). Sadaqah jariyah, known as a continuous and ongoing charity, is one of the good deeds that follows us to the grave, and the rewards of our sadaqah jariyyah remain for as long as it is used. It was narrated from Abu Hurairah that the Prophet SAW said:

"إذا مات ابن آدم انقطع عمله إلا من ثلاث: صدقة جارية ،أو علم ينتفع به، أو ولد صالح يدعو له" (رواه مسلم)
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Among the legal maxims that are used as the basis for the necessity of organ transplantation are, firstly, that matters shall be judged by their objectives (الأمور بمقاصدها). This method of fiqh assesses an act based on its purpose and intent. Preserving the patient's life while minimizing damage to avoid further harm is the aim of organ transplantation. The purpose of organ transplantation is to save lives, not to degrade or torture the departed. Secondly, the harm shall be removed (الضرر يزال). Islamic law strictly prohibits doing harm; hence, it is important to avoid doing injury wherever feasible. Patients undergoing organ transplant therapy can select the least hazardous course of action. It is advisable to select the less dangerous alternative when there are two possible risks in order to avoid more serious injury. In instances of organ transplantation, letting the patient who requires the organ die would be more harmful. Therefore, in this instance, it is advisable to remove the organ from the donor and deliver it to the recipient who needs it in order to do the least amount of harm.

Lastly, the hardship shall bring alleviation (المشقة تجلب التيسير). Humans can overcome the challenges presented by people with end-stage organ failure through organ transplantation. Islam permits forgiveness to individuals who have suffered injury by permitting the doing of prohibited acts to undo the harm, provided that there is no halal alternative available to them. Organ transplantation is now the patient's only chance to prevent end-organ failure.

From an Islamic perspective, organ transplantation is acceptable and permissible, with the condition that there are no other alternatives or methods that can save the patient's life. Furthermore, if this treatment method does not result in further injury to either the organ donor (if the donor is still alive) or the recipient of the organs, it is also necessary and permissible. Islam further demands that organ donation be carried out in good faith, with the sole goal of benefiting others and solely for the sake of Allah SWT, but not for financial gain, fame, status, or recognition. Tissues and organs cannot be exchanged either. This is due to the fact that Islam views the purchase and sale of organs and tissues as illegal. Additionally, the donor's consent and authorization must be obtained before an organ can be donated; coercion is not permitted.

Fatwas regarding organ donation in Malaysia

Since the 1960s, there has been discussion in Malaysia over the process of organ transplant treatment. An Islamic perspective on organ donation in Malaysia has been released by the National Fatwa Council. The National Fatwa Council, which met on June 23 and 24, 1970, declared that organ and tissue donation for the purpose of transplantation is permissible (Kementerian Kesihatan Malaysia, 2023). This ruling is recognized in other states that did not have a particular fatwa on organ donation, and it became a reference on the subject of organ donation and transplantation in Malaysia.

The National Fatwa Council convened on June 23 and 24, 1970, to discuss issues about organ transplants, including heart and eye transplants. According to the conference, it is acceptable (required) in Islam to transplant a deceased person's heart and eyes into a living person, subject to the following restrictions:

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¹ Rivad as-Salihin 1383. Retrieved from: https://sunnah.com/riyadussalihin:1383

- i. The transplant is deemed effective when it is performed urgently and necessarily where the recipient's life is at stake.
- ii. The donor's death in a heart transplant is predetermined by the specialist doctor.
- iii. It is important to take the proper steps to prevent the trafficking of human organs and the killing of people.
- iv. Before any organs are transplanted, consent must be obtained from the donors (in the event of a normal death) or from family members (in the event of an accidental death).

The sources that form the basis of this law are:

i. The method of organ donation is a convenience for those who need organs to overcome difficulties. This is demonstrated by what Allah SWT says in Surah al-Baqarah verse 185 about providing facilities:

Translation: "Allah intends for you ease and does not intend for you hardship". (Surah Al-Baqarah, 2:185)

- ii. The hadith of the Prophet SAW states that harm must be eliminated, as in his words, " لا ضرر " which means "Do not harm yourself and do not harm others".
- iii. The method of *fiqh* that stipulates that the least harm can be done between two harms, as contained in the method of "ارتكاب أخف الضررين" means doing the lesser harm.

The law permits organ donation and transplantation, but it is also subject to conditions that, in principle, are to protect various interests in accordance with the requirements of Islamic law, namely:

- i. Not putting the donor, who is still alive, in danger of dying or becoming disabled, such as losing his sight, hearing, or capacity to move.
- ii. The transplantation takes place with the consent of the concerned donor.
- iii. The donor must meet all requirements in order to give consent for organ transplantation. Therefore, people who are under duress, compulsion, confusion, or are of unsound mind cannot offer consent.
- iv. Doesn't involve actions like purchasing and selling that jeopardize human dignity. Instead, it can only be done with permission and donations.
- v. The doctors who perform transplants have sufficient scientific data to determine whether to treat a patient positively or adversely based on the Islamic law's concepts of maslahah (goodness) and *mafsadah* (damage).

Apart from national fatwas, other states also have their own state-level fatwas on organ transplantation and donation. The first state to address the topic of organ donation and transplantation, specifically corneal donation, was Perlis. This fatwa, which was published on November 6, 1965, declares that if a deceased person gives permission before they pass away, then it is required by law to take their eyes. Secondly, the Sarawak State Fatwa decided in December 1996 to focus on kidney donation and transplantation. According to this fatwa, there should be restrictions on kidney donation to kidney patients. The Selangor State Fatwa issued in 2000 is one of the most comprehensive fatwas in Malaysia because it addresses both the issue of organ transplantation in general and the issue of brain death, which is a precondition for organ donation from deceased donors. The Johor State Fatwa, which was decided on October 18, 2001, also discussed the issue of organ transplantation. This fatwa declares that it is unlawful to transplant or donate organs or tissues in non-emergency situations and that such actions should only be taken under specific, predetermined circumstances (Jakim, 2001). Lastly, on December 9, 2010, the Penang State Fatwa on organ donation and transplantation was gazetted. It stipulates that the law governing organ and tissue transplantation must comply with specific requirements (Jakim, 2010).

Types of organ donors

Organ donation is the process of donating one's body parts after death for the purpose of transplantation. The meaning of transplantation is an operation that involves the replacement of organs and tissues from a donor who has died for a recipient in need. This treatment method is incomplete without the involvement of organ donors and organ recipients. Organ donors are individuals who are willing to give their organs, either while alive or after death, to help others in need. Organ recipients are those who receive these donated organs through transplantation surgeries to improve or save their lives, usually people who are critically ill in the end stages of organ failure. By having the implementation of organ transplantation and donation in our country, it can help save the lives of organ and tissue recipients so that they can live happily.

So, there are two types of organ donors: living donors and cadaveric donors. Living donors refer to donors who are still alive. Living donors can only donate one kidney or part of a liver and bone marrow. Donations during life are divided into two types: firstly, living-related which is donation within family ties, and secondly, non-living-related, which is donation out of family ties. Donation during life has low risk, and like any other surgical procedure, organ donation also has certain risks, such as pain and numbness around the incision area, injury to surrounding tissue or other organs, and many more. It is also limited to those related by blood or who have emotional ties, such as husband and wife. Meaning that the organ donor is usually a blood relative or spouse to the recipient.

Next, those who donate their organs or tissue after passing away are known as cadaveric donors, sometimes known as non-living or deceased donors. Donations from cadavers are accepted and prioritized in this nation, and there is no risk to the donors. Family members must provide their agreement for an organ to be removed. The organ transplant procedure can proceed if the donor's spouse or family grants consent to donate organs from a cadaveric donor. Thus, deceased persons may donate their organs for transplantation with the approval of their surviving family members or spouse, provided that they made the decision to register as organ donors beforehand. There are two categories of cadaveric donors: brain deceased donors and cardiac deceased donors.

A brain deceased donor refers to an individual who has experienced irreversible brain damage which leading to brain death while their body may still be receiving support from machines. In such cases, although the body may be artificially supported, the brain has ceased to function, and the person considered is considered legally and clinically deceased. Organs from these donors can often be used for transplantation to save other lives. Brain death donors can donate organs and tissues such as heart, lungs, liver and kidneys, eyes (cornea), bones, heart valves and skin. A cardiac deceased donor refers to an individual who has experienced cardiac death, meaning their heart has stopped beating permanently and irreversibly. Unlike brain-dead donors, where other organs may still be viable after brain death, in the case of cardiac death, organ viability is more limited because the lack of blood circulation affects the organ's suitability for transplantation. Donors who died because of cardiac arrest can only donate tissues such as eyes (cornea), bones, skin, and heart valves. Indeed, organ donors who die in hospitals can donate all types of tissue. For organ donors who die at home, they can only donate tissue such as the eye (cornea). Therefore, the family needs to contact the nearest government hospital for the purpose of obtaining the tissue at home, and the tissue transfer procedure will also be carried out at home.

Analysis of the factors that decrease organ donation

We can see the statistics of organ donation and transplantation in Malaysia through a website on the internet. Until November 2023, statistics have shown that a total of 29,910 are the current active total number of organ donor pledgers in 2023, and the total number of current transplant patients on the waiting list is 9,941 people. Compared to 2022, a total of 56,883 people has pledged to donate organs, and this is the highest annual record for the number of organ donation pledges since 1997. This shows that organ donation statistics for the number of new organ donation pledges in 2023 have dropped and decreased. The rate of organ donation in Malaysia is decreasing due to the lack of people who are willing to pledge to be organ donors. Therefore, the following are the analyses of the factors that have been collected based on the results of the researchers' interviews with the experts:

Firstly, lack of awareness, understanding, and education has been a major factor in the lack of willingness to donate organs. Awareness of the importance of organ donation may still be low among the Malaysian community (Utusan Borneo, 2023). It's possible that a large number of people are not aware of the life-saving importance of organ donation. In fact, most Malaysians do not have a complete understanding of organ donation because this matter has not been taught since childhood and is not included in the education syllabus. With this, assumptions and myths arose among them, such as organ and tissue donation causing the body to be imperfect and changing the appearance of the body. In addition, they also think that taking organs from brain-dead donors will delay the burial process (Hasdy Harun, 2022). The majority of people believe that giving an organ will torture the deceased. Furthermore, some heirs would prefer not to postpone body management in order to facilitate organ donation. This is a misconception that we need to overcome. Therefore, if the community thinks this way, then it will have an impact on the number of organ donations in Malaysia.

Secondly, obstacles from family can indeed be a significant barrier to organ donation (Nor, 2022). Family refusal and influence affect the small number of actual donors in Malaysia. Every year, a large number of donation possibilities from possible candidates are lost because family members do not provide their consent, which is largely related to their acceptance of the idea of brain death, their concern about receiving unequal access to transplants, and, of course, their misperceptions about religious beliefs. Rejection by family can truly cause problems in two situations. First, it can occur even before the person registers as an organ donor by preventing the potential donor from following through on their plan to register as an organ donor. The other situation is when a family expresses their objections to the organ donation after the death of the registered donor. Family consent is crucial, especially for cadaveric donors. Even if someone has previously expressed their wish or willingness to be an organ donor, final approval for organ donation after their death requires consent from their family. So, their agreement plays a pivotal role in the organ donation process. This rejection and objection can affect the potential organ donor's ability to carry out organ donation.

Thirdly, one of the reasons for the decline in organ donation is the weakness of the Human Tissues Act of 1974. The Human Tissues Act 1974 (Act 130), which governs issues pertaining to consent and authorization of human organs extracted from deceased donors, governs organ donation in Malaysia. The Human Tissue Act 1974, as it currently stands, recognizes that a deceased person's spouse or next of kin may object to their organs being donated. This is stated in Section 2(2)(b) of the Human Tissues Act of 1974. In reality, objections raised by the relatives of active registered organ donors are also taken very seriously to the point where the organ procurement process will typically stop as soon as an objection is raised. This means that this section specifies the requirement for written consent from the family or next of kin before human tissue can be taken after a person's death. It outlines the condition where, even if someone has registered as an organ donor, final consent from the family or next of kin to make the ultimate decision regarding organ donation, even if the individual had previously registered as a donor.

Last but not least, Malaysia now uses an "opt-in" method for organ donations, which is one of the causes that contributes to the decline in organ donation. To opt in is to make the decision to do or participate in something. An "opting in" system, as used in the context of organ donation, is a method in which people are required to express their approval willingly and actively to be organ donors. In order to donate their organs, a person must register their decision; individuals who do not register are assumed to be non-donors. People who wish to donate their deceased organs must clearly state their wishes through an opt-in procedure, also called a donation policy. It is the opposite of opt-out in that no one is taken to be a willing donor unless they explicitly say that they would desire to donate their body after death. Because opt-in systems depend on people taking the initiative to register as donors, they may occasionally be a factor in the reduction of organ donation. The number of donors may decline due to reluctance or ignorance about voluntary registration. Other than Malaysia, several other nations including Taiwan, Japan, Australia, and many more also use opt-in as a transplant system.

The solutions that can be taken to increase organ donation

To increase the number of people who pledge to be organ donors and increase organ donations in Malaysia, various measures and efforts need to be taken. Here are some ways that can help increase organ donation in this country:

The authorities or the government can increase the education and understanding campaign related to organ donation in order to make the community aware of the importance of donating organs to people in need. We know that there are many campaigns in Malaysia, but they need to be more aggressive. This means that awareness, understanding, and education campaigns related to organ donation need to be organized more aggressively and proactively to attract people's interest in donating organs, especially to the younger generations. Apart from face-to-face campaigns such as exhibitions and booths, organ donation awareness and education campaigns through mass media can also be done. Mass media refers to various media technologies that aim to convey information and knowledge to the general public, for example, television, radio, computers, and cell phones. The power of mass media is currently widely used by everyone regardless of age because it provides many facilities for the community to make decisions about various problems through the information presented. With the existence of mass media, information about organ donation can spread widely and will be known by the public. Therefore, a campaign such as face-to-face or mass media is a step that can be taken to attract more people to register and donate organs. If more people are interested in this campaign, then it can increase the percentage of organ donation. Malaysia experienced a record-breaking surge in organ donation pledges in 2022. Regional statistics show that a significant percentage of the population in urban areas such as Kuala Lumpur pledged to donate, indicating the effectiveness of localized campaigns (R. Loheswar, 2023).

Secondly, there is one way to permanently put a stop to this issue by legally amending the Human Tissues Act of 1974. According to Section 2(2)(b) of the Human Tissues Act 1974, this act clearly acknowledges family objections from the deceased's spouse and next of kin, though in non-registered organ donor cases, they must be removed to avoid family influence from being misused and considered too authoritative. Because this section mentions that the husband or wife or any heirs of the deceased who are still alive when the deceased dies have the right to object to the body being managed in such a way, this matter leads to a factor in the decrease in the rate of organ donation in Malaysia. Overall, amending Section 2(2)(b) by removing the word "objects" can contribute significantly to creating a more donor-centric approach that respects the wishes of individuals while also providing clearer guidance to families, potentially resulting in higher organ donation rates and ultimately saving more lives. By amending this section, it can prevent the families from interfering with the deceased donor's wishes to donate their organs and tissues to those who are in need and who are having end-stage organ failure.

Moreover, implementing an opt-out system for organ donation is another idea or way to boost the rate of organ donation. In Malaysia, unless a person has specifically opted out or declined to donate their organs after death, they are regarded as potential organ donors by default under the opt-out system. Unless someone has officially registered their desire to donate or indicated their refusal to donate their organs, everyone in this system is assumed to be an organ donor. In essence, the opt-out system takes people's agreement for organ donation as given, unless they explicitly state that they object to or refuse to be organ donors. The goal of this strategy is to expand the pool of possible organ donors, which will enhance the supply of organs available for transplantation. Spain, Austria, and Belgium are a few of the nations that use the opt-out method for dead organ donation². Although transplantation rates are higher in countries with opt-out systems, more research must be done on cultural, ethical, and religious issues before implementing them in Malaysia.

Lastly, apart from holding organ donation campaigns to increase organ donation, we can also hold talks about organ donation in mosques. Many people think that organ donation involves religious beliefs; therefore, there are many misunderstandings about organ donation that cause many people to refuse to become organ donors in this country. Among the misunderstandings that are often associated with organ donation is that it is against religious teachings and will torture the corpse. Therefore, scholars or

² Willis, B. H., & Quigley, M. 2014. "Opt-out organ donation: on evidence and public policy". Journal of the Royal Society of Medicine. 107(2), 56–60.

religious speakers are responsible for explaining more deeply the importance of organ donation. In addition, they can also explain that organ transplantation existed during the time of the Prophet during the Badr War. For example, the Prophet transplanted the eyes of a martyr into the eyes of Qatada ibn. Norman, explaining that this organ transfer existed during the time of the Prophet during the Badr War (Albeny J.P, 2019). Disclosure about organ donation is not only done at exhibitions, booths, and so on, but it can also be done at mosques. This is because Muslims usually prefer to listen to lectures in mosques; no matter how old or young, they will listen to these lectures, and it can attract more people to pledge as organ donors.

Conclusion

In conclusion, organ donation and transplantation are permissible in Islam. Organ donation in Islam is often allowed and even recommended based on several main principles. Among them is the principle of humanity. Islam emphasizes high human values, including helping others. Organ donation is seen as a noble act to help others in need, save them, or improve their quality of life. Besides, the importance of saving lives. Islam emphasizes the importance of preserving life. In situations where organ donation can save or prolong the life of another sick person, this is seen as a good and meaningful action. Islam also encourages its people to share and give to others in need, including in the context of organ donation. This is in accordance with the concept of charity and giving in Islam. Organization can also reduce suffering and improve the health conditions of sick individuals. Islam emphasizes increasing well-being and reducing suffering. Most of the fatwas in Malaysia also support that organ donation and transplantation are allowed, such as the national fatwa issued in 1970, which states that eye transplantation from cadaveric donors to organ recipients is allowed.

There are still many people who refuse to pledge and donate their organs to people who are in need or have end-stage organ failure. We can see from the statistics of organ donation in Malaysia that in November 2023, a total of 29,910 people pledged to become organ donors. These numbers are small compared to the total number of people who pledged to become organ donors last year, which was 56,883. The population of Malaysian citizens is large, but the number of people who pledge to be organ donors is insufficient because of several factors, such as lack of awareness, understanding, and education, family refusal, the weakness of the Human Tissues Act 1974, and lastly, Malaysian practices an opt-in system. These factors are obtained as a result of the researcher's interviews with experts. Solutions must be taken to overcome these factors, such as increasing awareness campaigns, amending the Human Tissue Act 1974, introducing an opt-out system, and lastly, giving a talk in the mosque. All parties involved need to play an important and responsible role in increasing the rate of organ donation among Malaysians. Indeed, donating organs is a noble practice, and Allah will bestow and give a lot of reward to those who donate their organs to those in need and those who have organ failure. Donating an organ can save human lives, and if a person donates an organ, he or she can save eight human lives.

References

- Abdul Shukor, S., Osman, N. D., & Juliansyahzen, M. I. (2024). Maqasid syariah-based ethics in law and syariah programmes in higher education: Guarding emerging technology. *LexForensica: Journal of Forensic Justice and Socio-Legal Research*, 1(1), 34–40. https://doi.org/10.33102/kgwx6f94
- Abouna, G. M. (2008). Organ shortage crisis: Problems and possible solutions. *Transplantation Proceedings*, 40(1), 34–38.
- Akhil, Syamel Aswan, Zakaria, N., & Khushaini, A. (2024). Legal and ethical issues arising in organ donation and transplantation. *UiTM Institutional Repository*. Retrieved from https://ir.uitm.edu.my/id/eprint/64197/1/64197.pdf
- Al Jufri, K. A., Awang, M. S., & Sahid, M. M. (2021). Maqasid syariah menurut Imam Al-Ghazali dan aplikasinya dalam penyusunan undang-undang Islam di Indonesia. *Malaysian Journal of Syariah and Law*, 9(2), 75–87. https://doi.org/10.33102/mjsl.vol9no2.315
- Albeny, J. P. (2019). Pendermaan organ dari perspektif agama Islam. *Scribd*. Retrieved from https://www.scribd.com/doc/29523689/Pendermaan-Organ-Dari-Perspektif-Agama-Islam

- Ali, A., Ahmed, T., Ali, A., Dano, S., Khalid, M., Noor El-Dassouki, A., Orchanian-Cheff, S. M. H., Alibhai, S. M. H., & Mucsi, I. (2020). Organ donation and transplant: The Islamic perspective. *Clinical Transplantation*, *34*(4).
- Alias, M. A. A., Mohd Jailani, M. R., Wan Ismail, W. A. F., & Baharuddin, A. S. (2024). The integration of five main goals of shariah in the production of science and technology for human well-being. *AL-MAQASID: The International Journal of Maqasid Studies and Advanced Islamic Research*, 5(1), 1–16. https://doi.org/10.55265/al-maqasid.v5i1.79
- Anantachoti, P., Gross, C. R., & Gunderson, S. (2001). Promoting organ donation among high school students: An educational intervention. *Progress in Transplantation*, 11(3), 201–207.
- Aziz, N. (2015). Etika di dalam pemindahan organ: Kajian dari sudut agama Islam. https://doi.org/10.13140/RG.2.1.4583.0881
- Berita Harian. (2023). Malaysia antara 10 negara terendah derma organ di dunia. *Berita Harian*. Retrieved from https://www.bharian.com.my/berita/nasional/2023/09/1149642/malaysia-antara-10-negara-terendah-derma-organ-di-dunia
- Derma Organ. (2022). Lensa derma organ edisi kedua. *Pusat Sumber Transplan Nasional*. Retrieved from https://anyflip.com/dchcf/dfhc
- Fathiyyah, N. I., Nisrina, A. N., & Reno, A. (2023). Hukum penggunaan organ hasil donor (transplantasi organ) menurut pandangan Islam. *Jurnal Agama, Sosial, Dan Budaya, 1*(5), 1007–1013.
- Hamdan, N. I., & Hoque, M. (2021). Understanding and accepting organ donation among the students: A case study. *Maʿālim al-Qurʾān wa al-Sunnah*, 17(1), 31-41.
- Harson, H. (2022). Organ penyambung nyawa. *Berita Harian*. Retrieved from https://www.bharian.com.my/hujung-minggu/sihat/2022/08/992134/organ-penyambung-nyawa
- Hoe, L. I., & Shan, T. X. (2016). Dead donor: A failure of opting-in system in Malaysia. In *AND TOURISM RESEARCH CONFERENCE 20-22 April 2016* (p. 66).
- Ibrahim Shukri, N. I., Abu Samah, H. S., Ahmad Shukkeri, Z. A., & Hasmi, M. S. F. (2013). A critical study of presumed consent law in relation to organ donation in Malaysia.
- JAKIM E-SMAF V1. (2024). Derma organ pemindahan jantung dan mata. *Islam.gov.my*. Retrieved from http://e-smaf.islam.gov.my/e-smaf/fatwa/f
- Kassim, P. N. J. (2005). Organ transplantation in Malaysia: A need for a comprehensive legal regime. *Med. & L.*, 24, 173.
- Kementerian Kesihatan Malaysia. (2011). Pemindahan organ dari perspektif Islam. Retrieved from https://www.ummc.edu.my/files/HealthPhamplet/Pemindahan_Organ_IslamBM.pdf
- Kementerian Kesihatan Malaysia. (2023). Statistik pendermaan organ & transplantasi di Malaysia. Retrieved from https://www.dermaorgan.gov.my/
- Lim, K. J., Tsin, T., Jeffree, M. S., Hayati, F., Cheah, P. K., Ong Nee, K., Ibrahim, M. Y., Shamsudin, S. B., Lukman, K. A., Swe, A., & Tha, N. O. (2020). Factors influencing attitude toward organ and tissue donation among patients in primary clinic, Sabah, Malaysia. *Transplantation Proceedings*, 52(3), 680–686.
- Loheswar, R. (2023). National data: Malaysia's organ donations surge to record high last year; biggest proportion came from KL. *Malay Mail*. Retrieved from https://www.malaymail.com/news/malaysia/2023/09/24/national-data-malaysias-organ-donations-surge-to-record-high-last-year-biggest-proportion-came-from-kl/91546
- Maharani, T., Rahmina, L., & Mutia, S. (2023). Transplantasi organ tubuh manusia dalam perspektif etika kedokteran dan agama Islam. *Religion: Jurnal Agama, Sosial, Dan Budaya, 1*(4), 1184–1197.
- Mat Hayin, N. A. (2022). Derma organ selepas kematian. *Harian Metro*. Retrieved from https://www.hmetro.com.my/sihat/2022/01/797951/derma-organ-selepas-kematian
- n. a. (2023). Kesedaran orang ramai derma organ masih kurang. *Utusan Borneo*. Retrieved from https://www.utusanborneo.com.my/2023/08/14/kesedaran-orang-ramai-derma-organ-masih-kurang
- Noordin, N., Sawal, M. Z., Mustaffa, J., Zakaria, Z., Ngah, K., & Daud, M. S. (2012). The Malay dilemma on organ donation in Malaysia. 2012 IEEE Symposium on Business, Engineering and Industrial Applications, 604–607.
- Tumin, M., Noh, A., Jajri, I., Chong, C. S., Manikam, R., & Abdullah, N. (2013). Factors that hinder organ donation: Religio-cultural or lack of information and trust. *Experimental and Clinical*

- *Transplantation: Official Journal of the Middle East Society for Organ Transplantation, 11*(3), 207–210.
- Tumin, M., Noh, A., Mohd, S. N., Chin-Sieng, C., Soo-Kun, L., Abdullah, N., & Kok-Peng, N. (2012). Organ donation in Muslim countries: The case of Malaysia. *Annals of Transplantation: Quarterly of the Polish Transplantation Society, 18*, 671–676.
- Tumin, M., Noh, A., Raja, S. M., Yong, S.-L., Lim, S., & Ng, K. (2014). Low organ donation rate in Malaysia: A survey. *Journal of Health and Translational Medicine (JUMMEC)*, 17(1).
- Willis, B. H., & Quigley, M. (2014). Opt-out organ donation: On evidence and public policy. *Journal of the Royal Society of Medicine*, 107(2), 56–60.
- Worldometer. (2024). Malaysia population 2024. *Worldometers.info*. Retrieved from https://www.worldometers.info/world-population/malaysia-population/