Title: Organ transplants: ethical, social and religious issues in a multi-cultural society.

Abstract
Recent advances in the fields of organ donation and organ transplant have introduced new hope for the treatment of serious diseases. However this promise has been accompanied by several issues. The most common issue raised is ethical implications, but in a multicultural society like Malaysia, additional concerns arise pertaining to social and religious issues. These concerns needs to be addressed as attitudes towards and acceptability of organ donation varies according to social, culture and religion. The diverse cultural, religious and traditional concepts pertaining to organ donation may hamper its acceptability and cause a lack of willingness to donate organs. The purpose of this article is to briefly explore the ethical issues involved in organ transplant and the various religious opinions on organ donation. It is hoped that this knowledge and understanding may benefit both health-care providers and patients in a multicultural society like Malaysia.

Keywords: transplant, organ, ethics, social, religion, organ donation
Introduction

Organ transplant, defined as the transfer of a living tissue or organ to an injured or ill person to restore health or reduce disability, first started in the 1930s. This concept gave new hope and new life to ailing patients when several kidney transplants were successfully performed in the 1950s. Following that, doctors discovered how to transplant other organs successfully, hence improving quality of life, and reducing morbidity and mortality. Today, most organ transplants are relatively safe procedures, no longer considered as experiments, but considered as treatment options for thousands of patients with medical indications, such as those suffering from renal failure, heart disease, respiratory disease and cirrhosis of the liver.

Types of organ transplant

Organs can be transplanted from a living donor or deceased donor. Examples of organs transplanted from living donors are livers and kidneys. This is possible because liver is capable of regeneration, and human beings are born with two kidneys and have one ‘extra’ kidney to donate. There have also been reports of lung transplantation from a living donor, but this is still very rare. For these types of procedures, a patient in need of transplantation would seek a willing relative or friend as a donor. If the donor was a match, the surgical procedure would proceed without delay. However, a small number of living transplants are from charitable people donating for a good cause.

On the other hand, a patient who needs a heart transplant, a double lung transplant, a pancreatic transplant or a cornea transplant would need to get the organ from a deceased
donor or from people who are brain dead but on mechanical/organ-perfusion life support
5-7. Even though people who are brain dead are technically dead, their body and organs
would still be functioning, hence suitable for organ donation 5. However, some organs
deteriorate quickly after the body expires, thus making them inappropriate for transplant.

Organ transplant in Malaysia

Organ transplant has been in Malaysia since 1970s 8. However, the procedure was only
actively performed since 1997, when the National Transplant Centre was set up at
Hospital Kuala Lumpur 9. Among the successful transplants reported are kidney
transplant, cornea transplant and bone marrow transplant 2. Currently, the need for organ
transplant in Malaysia exceeds the supply that was donated 9. This means that there is a
need to support organ donations and transplant. In order to successfully promote organ
donation and transplant, it is important to consider and understand the ethical
implications, social and religious issues, especially in a multiethnic, multicultural and
multireligious country like Malaysia.

Ethical considerations in organ transplant

Organ transplant has been hailed as one of the greatest achievements of modern surgery 1.
There are however, many ethical dilemmas and controversies associated with this
procedure 10. Among the questions raised were; who gets priority? Will priority be based
on the severity of a person’s illness or his age or other factors? Will money, social status
or political connections influence this decision 3 10-14? Having a set of guidelines by the
National Transplant Committee solved this problem \(^9\). The role of the committee was to ensure that all Transplant Specialists adhere to this set of guidelines.

Another factor that needs to be considered was the cost of organ transplant, as all organ transplants are very expensive, as it includes the surgical process and later on, the continuing rehabilitation process. Would this mean that a rich person would get a new organ and a poor person refused \(^{10-12}\)? Setting up a National Transplant Fund, whose role was to help and fund organ transplant of those in need, reduced this problem.

A third factor to be considered was the question of consent and incentive. Currently, someone had to agree directly for transplantation in order for organs to be removed. However, consent has to be given willingly, and not taken under duress or after harassment. There should not also be any questionable incentive, e.g. where someone sells his kidney \(^{3\ 10-14}\).

The organ procurement process could also pose problems. This was mainly due to the different definitions of ‘death’. Should death be defined as when the heart and lungs stop, or when the entire brain ceased to have activity, or just when the higher functions stop? These are important issues as no one would want to take organs from someone who is still alive. However, waiting for ‘whole brain death’ could leave many organs unusable. From the physician’s or Transplant Specialist’s point, among the ethical principles to be considered is respect for patient autonomy, where competent patients have the right to make informed choices regarding their bodies and their lives; that they have the right to
refuse medical therapy under most circumstances and to offer their organs for transplantation, irrespective of the circumstances of their death\textsuperscript{3 10-14}.

There is currently a shortage of donor organs worldwide\textsuperscript{15}; the ageing population and increase in incidence of diabetes will worsen this shortage\textsuperscript{15 16}. Of the world’s 6 billion population, four-fifth is from the developing countries. Unfortunately the transplant rates in the developing world is much to be desired, at less than 10 per million population (pmp) comparing to 45-50 pmp in the developed countries\textsuperscript{17 18}. However, in Asia, there are marked variations in socio-economic status in member states and this is also reflected in the transplant. For example the renal transplant rates ranges from 0.16 pmp in Bangladesh to 21.4 pmp in Singapore\textsuperscript{18}. Therefore there is a demand for donor organs in the developed world. This problem is compounded by the general reluctance of Asians in cadaveric organ donation despite legal sanction for cadaveric donations and support from the major religious groups\textsuperscript{18}. Therefore it is not surprising that living donor organs contributes 85-100% of transplantation in the developing countries as opposed to 1-25% in the developed countries\textsuperscript{17}. These differences are mainly due to racial and cultural attitudes towards death and the sanctity of the human body, thereby affecting consent for cadaveric donation\textsuperscript{18}. Therefore a large market for the purchase for living unrelated organs (particularly kidneys) flourished. This is compounded by a low suitable donor pool of 1.6 donors available per recipient in the developing countries\textsuperscript{17}. The increasing ease of communication in the 21\textsuperscript{st} century has made organ trafficking and transplant tourism / commercialism into a global issues, accounting for about 10% of organ transplants performed yearly in the world\textsuperscript{19}. In recent years, it was reported that many
patients sought transplant in China, but most recently it was reported that that there is a shift of transplant tourist to Egypt\textsuperscript{19}. The usual destinations for transplant tourist are China, Philippines, India and Pakistan. However, following the Istanbul Declaration on organ trafficking and transplant tourism last year, many countries have adopted its recommendation to curtail transplant tourism; for example China, Philippines and Pakistan has taken major steps in the last 2 years and India is monitoring closely the illegal activities following the Gurgaon Scandal\textsuperscript{19}. Although clearly the Istanbul Declaration has a lot of support, a lot of work still has to be done and in reality cannot stop overnight organ trafficking and transplant tourism.

Law and regulations regarding living-unrelated transplantation in many countries are either non-existence or loosely regulated. Malaysia, for instance, has a vetting system by the National Transplantation Committee for living-unrelated transplantation. Although Singapore has a similar vetting system, the recent comment by Singapore Health Minister on compensation for the loss of a kidney is worrying\textsuperscript{20,21}. The scourge of rampant organ trafficking hopefully will dwindle following constant efforts by representatives of the Istanbul Declaration pushing the appropriate government agencies in the right direction.

Physician and Transplant Specialist should also consider values such as patient-doctor trust, respect for human dignity and presence of conflict of interest. This meant that the procedure should include a fully informed process where the interest of procuring organs should not interfere with optimal patient management during the dying process. Ethically and legally, a person should not be killed to provide organs for another, and that organ
retrieval can only begin until the donor had been declared dead. This determination of the correct interval between death and organ harvests is a continuous issue\textsuperscript{3, 10-14}.

Lately, there have also been concerns raised regarding the role of genetic engineering, the role of embryonic stem cells, cloning and transplant from animal sources, opening up a host of different ethical debates\textsuperscript{9}. Further discussion and research is needed to address these issues. Evidence-based results from these scientific researches have important implications for healthcare practices\textsuperscript{22}.

**Social and religious considerations regarding organ transplantation**

The shortage of organs for transplantation makes it important to understand why some oppose organ donation\textsuperscript{23}. There are many reasons why certain populations are less likely to consent to organ donations. Among these reasons, both social and religious issues play an important role, especially in a multiethnic, multicultural and multireligious community like Malaysia. It had been reported that the formal position of a religion to organ donation and transplant play an important factor in persuading the community regarding organ transplant\textsuperscript{24-27}.

**a. Social issues**

Many social issues need to be considered when promoting organ transplant in the community. Some of these issues are misconceptions that need to be addressed individually\textsuperscript{13, 23, 28-30}.
The first misconception that needs to be corrected is the perception that the body of the donor would be mutilated and treated badly. This is not so, as the organs would be removed surgically in a routine operation. Organ donation does not disfigure the body or change the way it look in the casket and normal funeral arrangement would be possible\textsuperscript{13 23 28-30}.

The second misconception is the worry that even if the person wanted to donate one organ, that other organs would also be taken. This worry can be corrected by informing the patient that only organs specified for donation will be taken from the body. The third misconception is the worry that if a person was involved in an accident, that the doctors would not save his life if they knew that he was a donor. This fact is totally incorrect as the doctors at the accident unit are different from those in the transplant team. The organ procurement team would only be notified after all lifesaving efforts had failed and after death had been determined, and after the family had consented to organ donation. The fourth misconception is the worry that a person’s religion do not approve donation. Generally, all organized religions support organ donation as it is typically considered a generous act; however this aspect will be discussed in more detail below. The fifth misconception reported was whether a person was the right age for donation. It was reported that age do not form a barrier for organ donation, as organs can be donated from someone as young as a newborn. However, transplant teams generally consider the age limit for tissue donation as 70 years old\textsuperscript{13 23 28-30}. 
b. Religious considerations

In this report, the author wishes to discuss the religious perspective of the 3 main religions in Malaysia; Islamic view, Confucianism and Christianity\textsuperscript{24-27 31}. The views of Buddhist and Taoist will be briefly addressed.

b. (i) Islamic perspective

There is a striking variability in attitudes towards transplantation throughout the Muslim world. The practice of organ donation and transplant is sanctioned in Saudi Arabia and Iran but unclear in Turkey\textsuperscript{10 25 32 33}. In contrast, almost half of Arab Bedouins believe that Islam prohibits organ donation\textsuperscript{32}. Majority of Muslim scholars (both Sunni and Shia) promote the importance of saving human life, based on the teachings of Prophet Muhammad who encouraged his followers to seek medical attention when ill, and hence allow organ transplantation. However, there is no unanimous support for this view. This variability in attitude towards organ donation is thought to be due to the variable opinions of individual religious leaders and Muslim scholars, who had variable knowledge regarding organ transplant\textsuperscript{24}.

It was reported that Muslims who argue against organ donation believed that Islam forbids organ donation as it was not mentioned in the Quran and traditional Islamic literature, believed that the body is owned by God and that only God could make decisions about its fate and had cited sacredness of the body, believed that the deceased’s body must be buried as soon as possible after death, expressed the view that the body is resurrected after death and that it was more desirable for a body to remain whole after
death, believed that disease would only be cured by god’s will and that they would prefer to wait for a divine cure rather than accept organ transplantation, and a belief that organs took an independent role as ‘witness’ to an individuals life on ‘Judgement Day’, and an anxiety that the donor would have no control of who receives his organ. There were also those who believed that organ transplantation extended a patient’s life and his suffering. In order to respond to these misperceptions, it would be important to recognize the importance of authoritative religious figures and involve them in the decision process for organ transplant. In Malaysia, as early as 1970, the Muslim Council (‘Fatwa Kebangsaan’), supported organ transplant, as it was considered an act of charity.

b. (ii). Confucianism, Buddhist and Taoist perspective

It has been reported that persons of Chinese ethnic origin, due to the influence of Confucianism values, Buddhist, Taoist and other spiritual beliefs do not support the thought or organ donation as they associate an intact dead body with respect for ancestors or nature. In particular, in Confucianism, the concept of ‘filial piety’ dictated that individuals should return their bodies in the same condition that they received from their parents, out of respect for their ancestors. It is therefore wrong to return a person’s body not intact by removing organs from it. However, if they do decide to donate their organs after their death, the priority is to close relatives, and then in descending order, distant relatives, people from their home country (other Chinese ethnic group) and then only to strangers. This ‘negotiable’ willingness to donate has enormous implications, where transplant specialist can use it as a strategy to increase organ donation rates among Chinese community. As for the Buddhist, they believe that the dying process takes
several hours, and the Taoist believes that organs have one to one relationship with nature.

b. (iii). Christianity perspective

As for Christianity, the main branches of Christianity; i.e. Catholics and Protestants support and encourage organ transplant. Christians look at Jesus Christ, whose life was one of self-giving as guidance. Pope John Paul II, the recently deceased Pope had repeatedly advocated organ donation and organ transplant as a ‘service of life’. However, in order to prevent conflict, it was suggested that the freedom of the prospective donor should be respected, and that the physician who determines death should not be a member of the transplant team.

Implications of ethical, social and religious aspect of organ transplants

Understanding the ethical, social, cultural and religious beliefs of a multiethnic population is important, as this could be used to explore negotiable limits of those beliefs and values. Firstly, a physician involved in the procurement process should explore issues based on the effect of procurement on the donor’s body, where, in a patient who may be reluctant to donate because the organ procurement process seemed to violate their religious and spiritual beliefs, a physician who understands this belief, may change the procurement protocol to allow a patient to donate their organs without violating their values. For example, a Buddhist patient who believes that the dying process takes several hours may allow his organs to be removed for donation if the clinician promised that the procurement process will only begin after a specific period of time had passed, or a
Taoist who believed that his major organs have a one-to-one relationship with nature may not allow those particular organs to be removed for donation, but may allow other organs or tissues to be procured. A Chinese patient, who declined to donate his organ to an open system, may be willing to donate if he were allowed to specify the recipient. This is because Confucianism beliefs emphasized the family as the moral basis of society. Thus, addressing this religious perspective is important, as people would be more willing to donate organs to people similar to themselves before they will donate to strangers at large. As for the Muslim community, the same ‘negotiation’, can be used where, the recipient of the organ from a Muslim should also be a Muslim, as this would be an act of charity in the name of ‘Islamic brotherhood’.

Even though this article aim to address the social and religious issue of organ transplant, the author would also like to mention the importance of addressing the emotional issues faced by the family (the loss, the grief and the anger), as the question of organ donation at the time of death would seem inappropriate, At this time, the family would be in a state of crisis, overwhelmed with grief, and hence not at their functioning level. The thought or idea of giving a vital organ of a loved one to another would not be welcomed. This aspect needs to be addressed by physicians and the transplant team.

Therefore to overcome the aforementioned difficulties, the following are suggested steps to be taken to attain societal acceptance of organ transplantation\textsuperscript{18}:

1) Minimizing difficulties of the organ donation process including avoiding
delays in funerals

2) Public Awareness of benefit of transplant to society, legal definition of brain death and stress absent of religious objections to transplantation

At present, the renal transplantation rate in Malaysia is very low at 5-7 pmp. This low rate is not able to keep up with demands for transplantation from patients with end-stage renal failure. This is reflected by a large number of Malaysians who sought renal transplantation abroad (64% of Malaysian receiving renal transplant, 1999-2008)\(^8\)\(^9\). One of the suggested ways to reduce this apparent deficit is by increasing cadaveric transplantation rate. The opt-out system of organ donation as practiced by Spain and Singapore is fairly effective in increasing the donor pool\(^{15}\).

**Conclusion**

Organ transplant is a safe procedure that gives new hope and new life to thousands of people. When dealing with this issue, it should not be forgotten that this is a discussion of life and death, where a decision is made on who lives, who dies and why. This issue is also regarding real people who are suffering, and decisions made based on good ethics and proper understanding of social and religious aspects will facilitate and make the process less painful. Both the community and physicians should therefore approach organ transplant positively and objectively and treat ethical, social and religious issues as negotiable perspectives and not barriers to organ transplant.
References:


