Editorial

Current Status of Organ Transplantation (Cultural, Ethical, Psychological & Trading Dimensions)

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Organ transplantation has become an effective means of restoring health and saving lives. Demand for transplantation is increasing, but there is concomitant deficit of organs from the traditional cadaveric pool. The results of living donor specially kidney transplantation is better than those of cadaveric transplantation. Successful organ transplantation has become a victim of its own. The cultural and psychological dimensions of organ transplantation are often overlooked in the process of meeting its exact technical requirements. This new branch of medicine has brought with it new ways of understanding death, human rights, commerce, gift-giving and ethics. It produces strong emotions in recipients, donors and transplanters alike. These factors need to be taken fully into consideration, if organ transplantation is to evolve in ways that are felt to be beneficial for all concerned.

The objectives of organ transplantation are:

1. Restoration of health.
2. Saving lives.
3. Providing alternative treatment for end-stage organ disease.

Two fundamental moral requirements have governed organ procurement:

i. Dead donor rule i.e. vital organs should only be taken from dead patients and living persons/patients must not be killed for organ retrieval.
ii. Care of living patients must never be compromised in favour of potential organ recipients.

Most organs are procured from patients who have been declared dead by neurological criteria i.e. they have irreversibly lost all brain functions and their bodies are being maintained on ventilators in intensive care units. They are commonly referred to as heart-beating cadavers (HBCDs); because their hearts were beating at the time of organ procurement. The patients, who have been declared dead by traditional cardio-pulmonary rather than brain-oriented criteria, are another potential source of transplantable organs. These patients are frequently referred to as non-heart beating cadavers (NHBCDs), because their hearts were no longer beating at the time of organ procurement. NHBCDs serve as a major source of transplantation of organs.

Recently two different methods of procuring organs have been developed. Firstly, organs are preserved in situ immediately following un-control[illegible]io-pulmonary arrest. Secondly, obtaining organs from patients who have died after choosing to forego life-sustaining treatment. Moreover, shortage of organs for transplantation and ethical dilemmas, make organ transplantation an un-usual and worrying field of medicine. Moreover, the methods to increase availability of organs from NHBCDs have increased public distrust for transplantation. All these above-mentioned methods of organ procurement have lead to complex clinical, ethical, cultural, psychological, and public policy implications of using NHBCDs.

The guiding principles issued by WHO in 1991, state that organs may be removed from the body of a dead person if:

1. Consents required by law are obtained.
2. There is no reason to believe that in the absence of any formal consent given during life, the dead person would have objected to such removal.

The laws of different countries fall into five categories. In the absence of a wish expressed by the donor during life; organs may be removed in the following circumstances.

- U.K: Only with the consent of the person in lawful possession of the body.
- NORWAY: After the relatives have been informed of the intention to remove organs; but irrespective of their consent.
- ITALY: Once it has been ascertained that the relatives do not object.
- BELGIUM: When the dead person had not expressed an objection during life, this is confirmed by the relatives and consent is then presumed.
- AUSTRIA: Irrespective of the relative's views.
- KUWAIT AND JORDAN: Muslim clergy accepted brain-stem death at conferences in Kuwait in 1985 and in Jordan in 1986; but it was later dissented by medical and political groups. Islamic organization of medical sciences (IOMS) issued a declaration allowing recovery of organs from brain-stem dead persons, after fulfilling the usual conditions set out in various protocols approved at conferences in Havana and San Francisco.

In late 1960s, definition and criteria for death began to focus on the brain. The "Uniform Determination of Death Act", has served as a model for most state statutes. "An individual who has sustained either:

a. Irreversible cessation of all functions both circulatory and respiratory.
b. Irreversible cessation of all functions of the entire brain including brain-stem is dead. Determination of death must be made in accordance with accepted medical standards.

The concept of irreversibility has since long resisted consensus analysis in logic and philosophy of language e.g. to some irreversible means:

"That a lost function cannot be restored by anyone under any circumstances at any time now or in future". While others believe that irreversible merely means that loss of function cannot be reversed by those means present at this time.

Pitbsburgh protocol envisions an even weaker interpretation of irreversibility i.e. death will be declared after only 02 minutes of ventricular fibrillation; when the failure to restore cardiac function will result not from lack of present means, but from a deliberate decision not to use them. This concept of irreversibility seems implausible to many. It is just like saying, "an automobile suffered irreversible loss of engine function, if the engine stops and does not start itself within 02 minutes, and one chooses not to take it to mechanic.

If this argument is correct, it means that NHBCD is not dead when organs are removed, since it might be possible to restore cardiac function; but a decision has been made not to make an attempt.

a. Patients who die by cardio-pulmonary arrest, we have no plan to resuscitate them and we declare death.
b. Patient who has lost the capacity for auto-resuscitation is determined to be irreversibly dead.
c. Irreversibility is not part of ordinary concept of death.

Many think that Pitsburgh protocol (PUMC) would violate the ethical norms on which transplantation is based. These critics argue that use of new and scientifically invalid criteria for determining death; and engineering of the dying process to accommodate the needs of transplantation would preclude its implementation, regardless of its effect on the supply of organs.

The ethics of using children and mentally incompetent adults as bone marrow donors has long been debated. A baby was conceived in USA because parents wanted to procure a supply of bone marrow for their 17 year old daughter. It has been reported that bone marrow donation by children exposes the donors to unfair pressures, threats and fear if they do not cooperate. Bone marrow donation by children is legally questionable, furthermore, can parents give informed consent to an invasive procedure that is not in the child's best interest? How should donation of bone marrow by children be regulated?

Similarly coercion is unethical and it means to persuade an unwilling person by force. A potential donor may feel a strong obligation to donate an organ because of guilt, love, duty or loyalty. The views of other family members may intensify these feeling. Concern about coercion has lead to reject all living donors.

Organ transplantation is a costly procedure even for industrialized countries. It requires efficient intensive care, advanced laboratory facilities and excellent staff. When the cost of immuno-suppression therapy is added, organ transplantation is un-affordable to the majority of the population in developing countries. Poverty and high cost of organ transplantation raise many ethical questions. The chances of rich or influential patients obtaining a transplant are much better than those of poor. Trade in organs, in the case of rich patients from other countries (poor and third world countries) has been difficult to prevent. These factors can place the medical profession under considerable strain which is reflected in their performance and their ethical values.

Each year thousands of organs are taken from executed Chinese prisoners without their consent and sold to the people in USA, needing transplantation. Two Chinese citizens offering to sell human organs from executed Chinese prisoners were arrested in New York. It renewed attention on practices that have long been condemned by human advocates. The European Union (EU) announced on February 23, 1998 that it will not support or introduce a resolution on human rights in China at the forthcoming United Nations Commission on Human Rights (UNCHR). Amnesty International says, the move sends a disappointing message to the Chinese victims of human right violation.

The primary benefit for living donors is psychological. Even if transplantation fails the donor knows that he did every thing possible to help his loved one. Some donors experience depression or conflict with family members. Asking a close friend or relative to donate exerts a great psychological pressure. Furthermore, knowledge of peri-operative mortality rate of 3 deaths/10,000 donors can enhance the pressure. Moreover, the donors can develop a number of complications during and after removal of organs:

- Pulmonary embolism in 2% of donors.
- Increased risk of hypertension.
- Mild proteinuria.
- Donors feel angry or guilty if there is an adverse outcome.

Recipient may feel burdened by a debt that he/she can never repay.

Walanbey stands against cardiac transplantation in Japan on account of following reasons:

Firstly, side effects of immunosuppressive drug prognosis and quality of life after transplantation. Secondly, transplantation involves prejudice inequality (organ recipients far exceeds donors), and recipient have to wait in vain.

Thirdly, arbitrary expansion of criteria for brain death, development of organs commerce, leading to organized crime and wish for an early death of histocompatible donors.

- Considering all these problems i.e. cultural, psychological, ethical, organ sale, concept of death, human rights, tissue or organ gift and altruism by proxy, the solution seems to be in developing artificial organs.
- The substitute for organs transplantation should be sought in developing artificial organs like artificial cochlea, lens, joints, heart valves, battery operated pace-makers and urinary bladder, artificial limbs, hands and feet.
- Golden Nose was advised by Prophet Muhammad Sallallah-o-Alaihe-Wasallam to his companion to use a nose made of gold instead of silver. (Abu Dawood, Tirmizi and Musnad-e-Ahmed).

Islam is message of Allah for the mankind/humanity and not for Muslims only. Allah Al-Mighty has created man in the best of moulds with His Hand; and honoured the son's of Adam as His vicegerent on earth and conferred upon them special favours above all other creation. Angels were made to bow down before Adam. The parts of the man's body are not his own; he can neither sell his body parts nor gift them to any other person* moreover, he cannot kill himself. Therefore, Islamic law prohibits:

- Removal of organs from living humans
- Donation of organs
- Sale of organs of his body
- Organ removal irrespective of consent given by living or dead person
- Self killing (suicide)
- Removal of organs for preparation of medicines or extracts

Islamic law does not allow even the use of (surgically) resected parts of human body irrespective of Muslims or non-Muslims, because human rights are equal for the whole mankind. Similarly, human parts cannot be used for preparation of medicines irrespective of religion, cast and creed of the deceased person.

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The poor people can advise and give conser ' to sell their body organs after death as a source of living for their family.