

Organ donation

Basic issues

Organ donation

- Organ donation is the donation of biological tissue or an organ of the human body, from a living or dead person to a living recipient in need of a transplantation.
- Transplantable organs and tissues are removed in a surgical procedure following a determination, based on the donor's medical and social history, of which are suitable for transplantation. Such procedures are termed allotransplantations, to distinguish them from xenotransplantation, the transfer of animal organs into human bodies.

Xenotransplantation

- Xenotransplantation, or the transfer of animal (usually pig) organs into human bodies, promises to eliminate many of the ethical issues, while creating many of its own.
- While xenotransplantation promises to increase the supply of organs considerably, the threat of organ transplant rejection and the risk of xenozoonosis, coupled with general anathema to the idea, decreases the functionality of the technique. Some animal rights groups oppose the sacrifice of an animal for organ donation and have launched campaigns to ban them.
- [also two religions consider pigs unclean, and at least three more are vegetarians and believe in ahimsa, do not violence to other creatures]

Moving towards donation

- Once a donor has been evaluated and consent obtained, provisional allocation of organs commences. UNOS developed a computer program that automatically generates donor specific match lists for suitable recipients based on the criteria that the patient was listed with.
- Organ coordinators enter donor information into the program and run the respective lists. Organ offers to potential recipients are made to transplant centers to make them aware of a potential organ. The surgeon will evaluate the donor information and make a provisional determination of medical suitability to their recipient.

Procurement

- Brain death may result in legal death, but still with the heart beating, and with mechanical ventilation all other vital organs may be kept completely alive and functional, providing optimal opportunities for organ transplantation.
- Most organ donation for organ transplantation is done in the setting of brain death. The non-living donor is kept on ventilator support until the organs have been surgically removed. If a brain-dead individual is not an organ donor, ventilator and drug support is discontinued and cardiac death is allowed to occur.
- In the United States, where since the 1980s the Uniform Determination of Death Act has defined death as the irreversible cessation of the function of either the brain or the heart and lungs, the 21st century has seen an order-of-magnitude increase of donation following cardiac death.

DCD Controversy

- In 1995, only one out of 100 dead donors in the nation gave their organs following the declaration of cardiac death. That figure grew to almost 11 percent in 2008, according to the Scientific Registry of Transplant Recipients.
- That increase has provoked ethical concerns about the interpretation of "irreversible" since "patients may still be alive five or even 10 minutes after cardiac arrest because, theoretically, their hearts could be restarted, [and thus are] clearly not dead because their condition was reversible

Distribution

- Distribution varies slightly between different organs but is essentially very similar. When lists are generated many factors are taken into consideration; these factors include: distance of transplant center from the donor hospital, blood type, medical urgency, wait time, donor size and tissue typing.

Transplantation

- Location of a transplant center with respect to a donor hospital is given priority due to the effects of Cold Ischemic Time (CIT). Once the organ is removed from the donor, blood no longer perfuses through the vessels and begins to starve the cells of oxygen (ischemia). Each organ tolerates different ischemic times. Hearts and lungs need to be transplanted within 4–6 hours from recovery, liver about 8–10 hours and pancreas about 15 hours; kidneys are the most resilient to ischemia.
- Kidneys packaged on ice can be successfully transplanted 24–36 hours after recovery. Developments in kidney preservation have yielded a device that pumps cold preservation solution through the kidneys vessels to prevent Delayed Graft Function (DGF) due to ischemia. Research and development is currently underway for heart and lung preservation devices, in an effort to increase distances procurement teams may travel to recover an organ.

Organ shortfall

- The demand for organs significantly surpasses the number of donors everywhere in the world. There are more potential recipients on organ donation waiting lists than organ donors.
- In particular, due to significant advances in dialysis techniques, patients suffering from end-stage renal disease (ESRD) can survive longer than ever before. Because these patients don't die as quickly as they used to, and as kidney failure increases with the rising age and prevalence of high blood pressure and diabetes in a society, the need especially for kidneys rises every year.

Wait list

- In the United States, about 108,000 people are on the waiting list, although about a third of those patients are inactive and could not receive a donated organ. Wait times and success rates for organs differ significantly between organs due to demand and procedure difficulty.
- Three-quarters of patients in need of an organ transplant are waiting for a kidney, and as such kidneys have much longer waiting times. At the Oregon Health and Science University, for example, the median patient who ultimately received an organ waited only three weeks for a heart and three months for a pancreas or liver — but 15 months for a kidney, because demand for kidneys substantially outstrips supply.

Reasons for discrepancies

- A lists of countries ordered by organ donation ranking created by the International Register of Organ Donation and Transplantation shows Spain, Belgium, France, and Italy — which all have "presumed consent" laws on organ donation, where everyone is considered a donor unless they specify otherwise — in the top in the top five.
- In contrast the USA — which practices an "opt in" consent law where their citizens provide express and informed agreement to donate organs and tissues in the event of their death — is also in the top five ahead of many other countries that are "opt in".

Questions

- What prevents people from becoming organ donors? If you are a donor, why did you decide to become one? If you aren't, why not?

Organ donation

Judaism

Preliminary questions

- First, from the perspective of Jewish law, does a Jew have an obligation to donate his kidney to another fellow Jew?
- Second, if such a medical procedure is allowable, ought he or she be compensated for this transplantable organ?
- Are these considerations grounded in halakha or in the writings of secular contemporary thinkers which serve as the source for arriving at a halakhically principled position?

Continued...

- May a person sacrifice his life by donating an organ to his fellow Jew if it is needed to save his life?
- Is a donor obligated to endanger himself, i.e., to undergo significant medical risk, in order to save the life of another?
- In the absence of significant medical risk, is one obligated to sacrifice a limb in order to save another individual?

Two ways to support

- Jewish teachings provide two compatible ways of thinking of organ sale as a religious duty.
- Jews may think of organ donation as either the imperative “*pikku'ah nefesh*, i.e., the saving of human life versus
- *habbala* i.e., wounding for the sake of rescue.

Explanation

- In the first case - the saving of human life - the philosophy behind living organ donation would be permitted because human life is saved
- in the second case- wounding for the sake of rescue- the operation itself is permitted even though it does “wound,” because it simultaneously saves.

Law and organs

- In the Talmud, saving a life supersedes most everything, and many commandments may be transgressed if the goal is to save a life.”
- [This is reflected in Jesus’ teachings on healing on the Sabbath, that it is better to save life than to follow other rules [Mark 3:4].]

Talmud

- The Talmud views the provisions regulating the duty to rescue as a resolution of the interplay between a positive and a negative commandment emerging from two different spheres of Jewish law.
- “From where do we know that if a man sees his neighbor drowning . . . he is bound to save him? From the verse, ‘Do not stand idly by the blood of your neighbor.’...” (*Sanhédrin* 73a).

Rabbinical commentary on safety

- Even if there is a slight doubt as to the danger, such as [the rescuer] saw someone drowning in the sea or being attacked by robbers or by a wild beast, in all of which [circumstances] there is some doubt as to the danger [posed to him], yet he must save
- If the doubt tends towards certainty, he [the rescuer] does not need to sacrifice himself to save his fellow Jew, and even where there is a significant doubt, he does not need to do so, for who said that your fellow's blood is redder?

In sum:

- Because the gift of life is sacred, the Jews, permit organ donation.
- Even though there is risk, the transplantation is permitted.
- However, there exists no obligation to donate a kidney; it is an act of piety, i.e., *middat hasidut*.
- And kidney selling violates one's humanity and impairs one's rationality and autonomy.

Questions

- Some Orthodox Jews will not permit people with tattoos into their cemeteries because of how it defaces the body. Do you think the same should hold true for organ donation? Why or why not?

Organ donation

Christianity

Life as value

- Thomas Aquinas' natural law states that humans are inclined to preserve life, which is a good. This preservation of life has the highest value and can also be stated negatively in prohibitions of killing
- Because the gift of life is sacred, Christians permit organ donation.

Catholic support

- The Catechism of the Catholic Church states, “organ transplants conform with the moral law and can be meritorious if the physical and psychological dangers and risks incurred by the donor are proportionate to the good sought for the recipient.”

Pope's perspective

- Pope Pius XII in 1956 stated:
- A person may will to dispose of his body and to destine it to ends that are useful, morally irreproachable and even noble, among them the desire to aid the sick and suffering . . .
- Pope John Paul II, in his Encyclical Letter, *Evangelium Vitae* (The Gospel of Life) said:
- These are the most solemn celebration of the Gospel of life, for they proclaim it by the total gift of self . . . A particularly praiseworthy example of such gestures is the donation of organs, performed in an ethically acceptable manner.”

...with caveats

- Current “Catholic moral theology allows organ donation out of love, provided the functional integrity of the body is maintained”
- Organ donation requires a prior, explicit, free and conscious decision on the part of the donor” which renders “the gift of life” truly free.
- This cannot be done under coercion, threat, and for most people, financial recompenses.

Living versus dead donor

- It has been said that the moral issues in the donation of organs from living donors are different from those involving organs from dead persons.
- However, the basic principles are the same:
- A person can only donate that part of self by which he can deprive himself without serious danger or harm to his own life or
- An entire vital organ can only be donated after death.
- The body can never be treated as a mere biological entity; nor can its organs or tissues ever be used as items for sale or exchange

Organ procurement and death

- The determination of death should be made by the physician or competent medical authority in accordance with responsible and commonly accepted scientific criteria.
- .Such organs should not be removed until it has been medically determined that the patient has died. In order to prevent any conflict of interest, the physician who determines death should not be a member of the transplant team.
- The use of tissues or organs from an infant may be permitted after death has been determined and with the consent of the parents or guardians

Brain death

- “For legal and medical purposes, where respiratory and circulatory functions are maintained by artificial means of support so as to preclude a determination that these functions have ceased, the occurrence of death may be determined where there is the irreversible cessation of the functioning of the entire brain, including the brain stem, determined in accordance with this section. “
- i.e. heart and lungs may be kept “alive” to get the organs

What is not death...

- The persistent vegetative state. When brain stem function remains but the major components of cerebral function are irreversibly destroyed, the patient is not “brain dead.”
- “Do not resuscitate” orders. This is fundamentally a decision that cardio-pulmonary resuscitation and other extraordinary measures are contra-indicated because of the hopelessness of the patient’s prognosis. This is different from a determination of death.
- Ordinary versus extraordinary care. The physician’s and the patient’s respective obligations to use or accept certain forms of therapy is not relevant to the patient who has been declared dead. Such a patient is beyond benefit or burden. Brain-based determinations of death are employed with the patient on extraordinary forms of artificial life support.

Use of anencephalic children's organs

- The demand for healthy organs brings on ill-advised attempts to expand the supply by redefining death or dehumanizing dying patients.
- For example, there are the recurring efforts to define the anencephalic child as dead, although such a child is breathing and has a heart beat and some brain function.

But...

- This baby is a human being, a citizen, and legally protected by the Americans with Disabilities Act.
- More importantly, she or he is a child of God, made in His image and likeness, and must not be treated as an object or a mere means to the benefit of others.

Encouraging donation

- When the conditions that determine death are properly met the donation of organs is highly encouraged.
- In such cases, organ donation constitutes an act of charity by which donors make it possible for recipients to continue their earthly life while they themselves receive the reward promised to the generous.
- The most appropriate time to consider organ donation is before the time of death when emotion can easily overwhelm reason.
- There is a great need for serious reflection to be given by individuals as to their willingness to donate their organs at the time of their physical death.

Questions

- Are you surprised that the Catholic church encourages organ donation, considering its conservative perspective on early life issues? Why is this? Is it a consistent stance?

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