

TRANSPLANTATION OF HUMAN ORGANS- **An insight into the Act**

The value of life is not its duration, but in its donation. You are not important because of how long you live, you are important because of how effective you live.

Don't think of organ donations as giving up part of you to keep a total stranger alive. It's really a total stranger giving up almost all of them to keep alive. Don't take your organs to heaven with you. Heaven knows we need them here. By becoming an organ donor, one person can save the lives of up to eight people and improve the lives of dozens- mothers and daughters, fathers and sons, brothers and sisters and even the needy strangers who are desperately in need of a transport.

MEANING

Organ donation is an act of giving one or more organs, without compensation, for transplantation into someone else. Organ donation is a very personal yet complex decision, intertwined with medical ,legal ,religious, cultural ,and ethical issues. Today organ donation strictly defined, encompasses the donation and transplantation of the heart ,intestines, kidneys, liver, lungs, and pancreas. Organ donation is the process of surgically removing an organ or tissue from one person (the organ donor) and placing it into another person (the recipient) .Transplantation is necessary because the recipient's organ has failed or has been damaged by disease or injury.

Organ Donation

The process of organ donation can save as many as eight lives through the surgical transplantation of organs to recipients . Most often donors are deceased ,but some organs can be donated by living donors.

Deceased donors can provided the following organs:

*Samiksha Pokhriyal- intern
*Surbhi Sharma- intern

kidneys, pancreas, liver, lungs, heart, and intestines, which can be used to save the lives of as many as 8 people.

Deceased donors also can provide tissues (such as bones, skin, heart valves and veins) and corneas.

Living donors can provide a kidney or a portion of the liver, lung or intestine and, in some instances, eyes and tissues.

Who can be an organ donor?

People of all ages should consider themselves potential donors. When an individual dies, they are evaluated for donor suitability given their current and past medical history as well as their age. The Organ Procurement Agency determines medical suitability for donation.

Valid Consent

Assuming consent is ethically necessary before taking organs from living competent people, questions arise about what consent is valid. The usual answer in medical ethics is that consent must be free (voluntary), sufficiently informed, and made by someone with the capacity (competence) to consent. Thus in the context of living donation involves, including the risks to them and the chances of success for the recipient they must be able to decide freely whether to donate, and they must be competent to do so.

Can people freely give consent when considering whether to donate to a close relative? It may be thought that consent in such a case is suspect because potential donors would be: (1) desperate to save their relatives (2) subject to a feeling of moral obligation or (3) subject to family pressure. The first two reasons are not good ones. People give valid consent in other desperate circumstances, for instance to a lifesaving operation, and acting out of a reasonable sense of moral obligation is a way of exercising one's freedom rather than a constraint upon it (we consider below unusual senses of obligation in the context of religious stranger donation).

Family pressure is different. Family pressure may take the form of credible threats to violence, in which case the potential donor is coerced and any consent invalid. Family pressure may be felt as a

form of moral obligation on the part of the donor, in which case consent would not be made invalid for that reason.

Consent as per Act :

Donation can be either done by pledging for organ donation when a person is alive or by consent of family after death .The potential donor can also approach Organ Donation agencies for a donor card which is available free of cost. During lifetime ,a person can pledge for organ donation by filling up a donor form in the presence of two witnesses, one of whom shall be a near relative. Although not legally binding ,the donor card is a means of expressing one's willingness to donate organs and make family more understanding towards the cause. However, the prerogative on the decision eventually rests with the next of kin of the deceased after expressed written consent .If a person expires without registration, the family members can donate his/her organs. For this they need to sign a consent form, which is provided at that time and organs are harvested within a few hours. The transplant coordination team carries out the entire process till the relatives receive the body of the deceased. The deceased body is given back to the family in a dignified way with no disfigurement.

Organ transplantation has become indispensable for ensuring the survival of many and thousands of people all over the world lose their lives due to severe shortage of organs .The official policy underpinning almost all transplant regimes is that of organ donation. Consent assumes a central place in legal and ethical analysis of transplantation practices, notably with regard to living donors but also vis a vis cadaveric donors. In the latter connection, there is preferred legal response, the premise being that the latter will result in greater volume of organs for transplant. The availability and use of cadaveric organs and tissue is inevitably closely connected to the ability and willingness of the deceased (prior to death) or surviving relatives to veto removal.

Presumed Consent

Across the world the form and method of obtaining consent for removal of organs from brain dead individuals has evolved over

the years .The most common is informed consent in which close family members agree to donate organs after brain death has been certified. This form of consent is a vague term and in some countries no hierarchy of relatives has been specified in the rules. There have been cases of differing views within the donor family The ethical question here is whether unanimity in concurrence is to be sought and if not whether one family member views can override others.

Other system is opt-out or presumed consent where anyone who has not refused is considered as a donor. Many countries such as France Greece, Portugal, Spain, Luxemburg, Austria, Belgium, Denmark, Great Britain, Italy Norway, Sweden, Turkey, Singapore, Israel, Japan, Switzerland etc have tried to increase organ donation rates by implementing a presumed consent or put out approach to organ donation. Organ donation rates in Belgium, Spain and Austria suggest that the presumed consent approach may have a positive effect on rates on organ donation. For instance, the number of organ donors in Spain has risen continuously from 14.3 per million population in 1989 to 25 per million in 1994 .The most celebrated success of these experiences is the case of Belgium, where organ recovery is more than double following implementation of its policy of presumed consent. Considering that the system results in higher rates of organ procurement it may also be beneficial to introduce presumed consent legislation in India.

However this will be possible only after creating widespread awareness about organ transplantation and addressing the religious and cultural overtones that are associated with it. It can be effective only when there is good infrastructure, for the removal, distribution, transportation and transplantation of organs. Presumed consent respects the principle of individual choice by giving objectors to organ donation an opportunity to empower their anti donation preference and thus does not infringe the right to choose.

Incentives for deceased donor:

The idea of incentivizing donor families has also been discussed in the public domain and transplant circles in India. The incentives discussed range from simple waiver of the donor's

hospitalization costs to various proposal to support the donor family members including preference in jobs, free lifelong railway passes, and support for children's education. Since the recipient and the hospital performing the transplant are beneficiaries of the donation, It has been argued that there is no reason why the Act should not be acknowledged and compensated in some form. This idea many seem to have some merit especially since the recipient is often a rich person. Also in an intrinsically unequal society this could be the slippery slope to inducement and a soft form of trading even in deceased donation. The inevitable scandals and intrigue surrounding will impact the small but significant change.

SALIENT FEATURES OF THE ACT

This Act was enacted for removal, storage and transplantation of human organs and tissues for therapeutic purposes and for the prevention of commercial dealings

- Sec 3 : (1): any donor before his death can authorize the removal of any human organ and tissue or both of his body for therapeutic purposes.
- (2): any donor can authorize the removal of any human organ and tissues ,after his death if he had given in writing and in the presence of two or more witnesses and at least one witness should be a near relative.
- (3): where no such authority as referred in sub sec(2) was made by any person before his death but no objection was also expressed then the person lawfully in possession of the dead body of such person may authorize the removal of any human organ or tissues or both for therapeutic purposes.

Sec 5- AUTHORITY FOR REMOVAL OF HUMAN ORGAN AND TISSUE OR BOTH IN CASE OF UNCLAIMED BODIES IN HOSPITAL OR PRISON : In case of a dead body in a hospital or a prison and which is not claimed by any of the near relatives within 48 hours from the time of the death then the management or the

control of the hospital or the prison can give the authority for the removal of any human organ and tissue or both from the dead body.

Sec 9: RESTRICTION: No human organ and tissue or both can be removed from the body of the donor into a recipient unless a donor is a near relative . No human organ and tissue or both can be removed from the body of the minor before his death. No human organ and tissue or both can be removed from the body of a mentally challenged person.

Sec 18: PUNISHMENT FOR REMOVAL OF HUMAN ORGAN WITHOUT AUTHORITY : Any person who renders his services to or at any hospital and who for purpose of transplantation, conducts or helps in any manner shall be punishable with imprisonment of the term which may extend to ten years and with fine which may extend to twenty lakh rupees and in case of conviction of registered medical practitioner his name shall be removed from the register of the council for period of 3 years.

Sec 19: PUNISHMENT FOR COMMERCIAL DEALINGS IN HUMAN ORGANS:

- a) Whoever makes or receives any payment for the supply of or for an offer to supply a human organ;
- b) Seeks to find person willing to supply for payment of any organ;
- c) Offers to supply any human organ for payment .
- d) Initiates or negotiates any arrangement involving the making of any payment for the supply of or for an offer to supply any human organs;
- e) Takes part in the management or control of a body of persons , whether a society firm or company
- f) Publishes or distributes or causes to be published or distributed any advertisement,-
 - (a) Inviting persons to supply for payment of any human organ;
 - (b) Offering to supply any human organ for payment ;or

(c) indicating that the advertiser is willing to initiate or negotiate any arrangement referred to in clause (d) shall be punishable with imprisonment for a term not less than two years but which may extend to seven years and shall be liable to fine which shall not be less than ten thousand rupees but may extend to twenty thousand rupees: Provided that the court may, for any adequate and special reasons to be mentioned in the judgment impose a sentence of imprisonment for a term of less than two years and a fine less than ten thousand rupees.

Sec23: PROTECTION OF ACTION TAKEN IN GOOD FAITH:

No suit or prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of the provision this Act.

#Sikhism

Organ donation is the gift of an organ to help someone who needs a transplant.

The Sikh philosophy and teachings support the importance of giving and putting others before oneself.

Seva (The act of selfless service, to give without seeking reward or recognition) is at the core of being a Sikh.

Indeed, Guru Nanak (founder of the Sikh faith and first of ten Gurus) and Guru Granth Sahib (Sikh Holy Scripture) devoted their lives to humanity and sacrificed their lives looking after the welfare of others.

Seva can also be about donating your organ to another Sikhism does not attach taboos to organ donation and transplantation and stresses that saving a human life is one of the noblest things you can do.

Sikh also believe that your body does not need all its organs at or after death.

#Islam

Organ donation is giving an organ to help someone who needs a transplant.

In Islam there are two schools of thought with regard to organ donation. The human body , whether living or dead, enjoys a special honor and is inviolable, and fundamentally , Islamic law emphasizes the preservation of human life. The general rule that necessities permit the prohibited (al- darurat tubih al-mahzurat) has been used to support human organ donation with regard to saving or significantly enhancing a life of another provided that the benefit outweighs the personal cost that has to be borne.

#Hinduism

Organ donation is giving an organ to help someone who needs a transplant.

There are many references that support organ donation in Hindu scriptures. Daan is the original word in Sanskrit for donation meaning selfless giving. It is also third in the list of the ten Niyamas (virtuous acts).

Life after death is a strong belief of Hindus and is an ongoing process of rebirth. The law of Karma decides which way the soul will go in the next life.

#Christianity

Organ donation is giving an organ to help someone who needs a transplant.

The Christian faith is based upon the revelation of God in the life of Jesus Christ.

Jesus taught people to love one another and embrace the needs of others.

Christianity and organ donation

Christians consider organ donation as an act of love and a way of following Jesus example

Christians believe in eternal life, and preparing for death should not be feared

Christians believe that nothing that happens to our body ,before or after death can impact on our relationship with God.

Organ transplant is only permitted when the donor is dead. Living donors are only permitted to donate the paired organs like kidney, lungs where donor can survive with just one also the living donor can donate fluid and tissue that will regenerate like blood, bone marrow and part of liver.

Death is of different types. One of them is brain death.

Brain death

Brain death occurs when a person has an irreversible, catastrophic brain injury, which causes total cessation of all function(the upper brain structure and brain stem). Brain death is not a coma or persistent vegetative state. Brain death is determined in the hospital by one or more physicians not associated with a transplantation team.

- Some causes of brain death include (but are not limited to):
- Trauma to the brain (i.e. severe head injury caused by a motor vehicle crash, gunshot wound, fall or blow to the head)
- Cerebrovascular injury (i.e. stroke or aneurysm)
- Anoxia (i.e. drowning or heart attack when the patient is revived , but not before a lack of blood flow/oxygen to the brain has caused brain death)
- Brain tumor

Most organ donors are patients who die as a result of a brain hemorrhage, severe head injury or stroke and are on a ventilator in a hospital intensive care unit (ICU). These donors are called donation after brain stem death donors.

Death is diagnosed by brain stem tests. There are very strict standards for doing these and they're always carried out by two experienced doctors.

A ventilator provides oxygen, which keeps the heart beating and blood circulating after death. Organs such as heart, lungs and livers can be donated by a DBD donor.

Donation after circulatory death

Patients who die in hospital but aren't on a ventilator can donate their kidneys and, in certain circumstances, other organs. They're called donors after circulatory death.

In these cases, the organs must be removed within a few minutes of the heart stopping to prevent them being damaged by a lack of oxygenated blood.

Both types of donors can donate their corneas and other tissue.

TIME PERIOD OF REMOVING THE ORGANS FROM THE BODY OF THE DONOR

Eye and Corneas: it can be removed only in case where the donor is dead and within the time period of 6 hours.

Heart and heart valves: it can be removed only in case where the donor is dead and within the time period of 3 hours.

Lungs: it can be removed only in case where the donor is dead and within the time period of 3 hours. In case of deceased donor and in case of single lung transplant the operation will take the time period of 4 to 8 hour and in case of double lung transplant the operation will take time period of 6 to 12 hours.

Kidney: it can be removed only in case where the donor is dead and within the time period of 3 hours, in case of deceased donor.

Skin: About three hours after death, rigor mortis a stiffening of muscles sets in. Around 12 hours after death, the body will feel cool, and within 24 hours (depending on body fat and external temperatures), it will lose all internal heat in a process called algor mortis. The muscle tissue begin to lose its stiffness after about 36 hours, and within about 72 hours of dying, the body's rigor mortis will subside.

Pancreas: it can be removed only in case where the donor is dead and within the time period of 3 hours. In case of deceased donor although it is very difficult and is successful only in 85% of cases.

Femoral and saphenous veins: it can be removed both in case where the donor is dead as well as living and within the time period of 2-3 hours in case of deceased donor and the living donor can live a healthy life without any problem and it is a very important transplantation in case of a person who is diabetic and is on the verge of losing his legs or hands.

Bones: Bone grafting is a surgical procedure by which new bone or a replacement material is placed into spaces between or around broken bone (fractures) or holes in bone (defects) to aid in healing.

Bone grafting is used to repair bone fractures that are extremely complex, pose a significant risk to the patient, or fail to heal properly. Bone graft is also used to help fusion between vertebrae, correct deformities, or provide structural support for fractures of the spine. In addition to fracture repair, bone graft is used to repair defects in bone caused by birth defects, traumatic injury, or surgery for bone cancer. And this transplantation must take place within 10 days.

CRITICAL ANALYSIS:

1. **TIME DURATION-** As we have analyzed that the time period of removing any organ from the body of a deceased donor is 6 hour in case of eye and 3 to 4 in case of heart, lungs, kidney, skin, pancreas femoral and saphenous veins however sec 5 of transplantation of human organ Act and its new amendment states that-

AUTHORITY FOR REMOVAL OF HUMAN ORGAN AND TISSUE OR BOTH IN CASE OF UNCLAIMED BODIES IN HOSPITAL OR PRISON:

In case of a dead body in a hospital or a prison and which is not claimed by any of the near relatives within 48 hours from the

time of the death then the management or the control of the hospital or the prison can give the authority for the removal of any human organ and tissue or both from the dead body, now the actual problem arises. According to medical practice the organs can only be removed within 3 to 4 hours or 6 hours in case of eye and the time period decided by the legislature under this act is 48 hours or 6 hours. Now if the hospital authority is going to wait for the near relatives of the donor in case where they are unknown, then the organ of the deceased person are of no use. Therefore if we want this legislation to become successful then in that case, the time period of 48 hours should be abandoned and if the medical practitioner in good faith has declared, it should be removed after postmortem as soon as possible. And if the doctor is found guilty of removing the organ malafide, then severe punishment must be given to the doctor and his associates.

2. **CONSENT**- Another controversial issue is once the consent has been given by the donor under the present Act then after his death, consent from his parents or the donor's children is taken and if they deny, then no transplantation of the human organ can take place. This problem must be overcome by an amendment in the Act. The rule must be made that once the consent has been given by the donor without any mistake and undue influence then it shall be considered as the donor's final consent and as soon as the donor dies his organs should be removed.
3. **INNOVATION**: An innovation in the field of organ donation must be brought which means that the earlier Act states that a donor can register himself with any registered practitioner or registered hospital but now when a donor gives his consent then a donor card must be made and that must be biometric and the same must be linked to our adhar card and whenever the donor dies his adhar card will immediately show that the person is an organ donor and the organs can be removed and can be used for the benefit of a needy patient.

4. **AWARENESS:** A lot of awareness has to be spread among the people. At present this thing is only limited to Himachal Pradesh and Haryana and southern regions of the countries such as Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra. Now it's time to spread awareness among all the states and convince them to donate their organs to those who are in need of the same. For this, firstly the hindrances created by the religion must be removed and convinced that all the religions teach that human should help another human being in his odd days .
5. **CENTRALISED AUTHORITY:** The central government must create a centralized authority who can regulate the complete structure of organ donation in India.
