



ORGAN DONATION

The next best thing to creation of life



What is organ donation?

- 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. These tissues or organs are removed in a surgical procedure following a determination, based on the donor's medical and social history, of which are suitable for transplantation.
- All major religions accept organ donation in at least some form on either utilitarian grounds (*i.e.*, because of its life-saving capabilities) or deontological grounds (*e.g.*, the right of an individual believer to make his or her own decision).



What Experts Say



**World Health
Organization**

"Transplantation of human cells, tissues or organs saves many lives and restores essential functions where no alternatives of comparable effectiveness exist.

In 50 years, transplantation has become a successful worldwide practice. However, there are large differences between countries in the level of safety, quality, efficacy of donation and transplantation of human cells, tissues and organs. The ethical aspects of transplantation are at the forefront. In particular, the unmet patients' needs and the shortage of transplants lead to the temptation of trafficking in human body components for transplantation."



KFI
KIDNEY FEDERATION OF INDIA

Some eye-opening facts

- Over 10 lakh persons in India suffer from end-stage organ disease and need donated organs to survive
- Each day 250 precious lives are lost due to absence of donors
- One organ donor can save up to eight lives. The same donor can also save or improve the lives of up to 50 people by donating tissues and eyes.

"If we are prepared to receive a transplant should we need one, then we should be ready to give."



..and eye-opening reality!

- Lack of awareness even among educated people
- Misconceptions and myths
- Exploitation by organ rackets and middlemen
- Several thousand individuals dangling dangerously between life and death
- Red tape
- Lack of organized activity to improve the situation

Alarming Facts About Kidney Disease

- Approximately 7.85 million Indians suffer from chronic kidney failure.
- The incidence kidney failure (or chronic Kidney disease) has doubled the last 15 years.
- It is estimated that currently there are over 1 million people worldwide who are alive on dialysis or with a functioning graft.
- Asians more prone due to the high occurrence of diabetes and hypertension.
- Almost 66% kidney failure occurs due to hypertension or diabetes.
- In India 90% patients who suffer from kidney disease are not able to afford the cost of treatment.
- The crisis of kidney shortage is a global phenomenon and it is worst in Asian countries. There were over 75,000 patients waiting for a transplant in the United States at the end of 2007.

Types of Kidney Donation

There are three types of kidney donors (accepted by law of the land):

- Live related (1st degree relatives): Between parents and children, siblings and spouse
- Live unrelated: An altruistic donor, for whom permission has to be obtained from the authorisation committee, Government of Kerala
- Kidney from the brain dead patients (Cadaver Kidney transplantation)

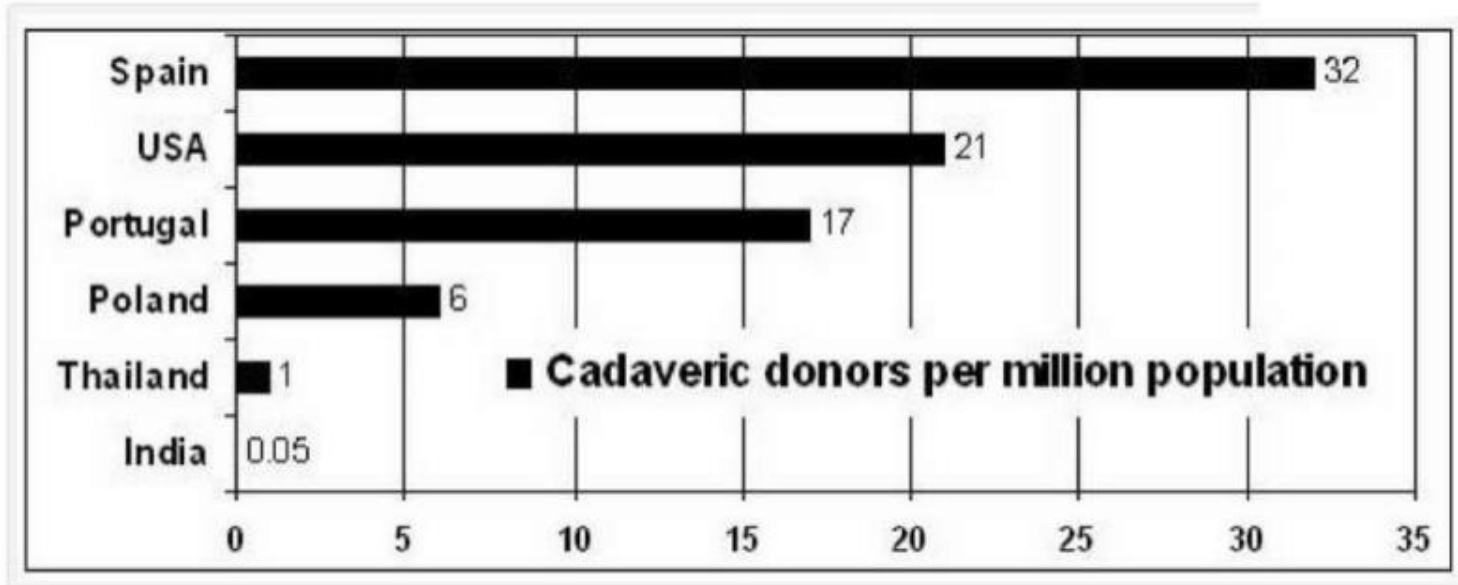
Living Donors

- Living donation does not always happen because of the spirit of giving
- Mostly forced by circumstances for money
- Exploitation by Middle-men/rackets
- Benefits do not reach paid donors
- Women often forced to donate kidney for close family
- Kidnapping, murder, removal of organs without the donor being aware
- Deterioration of health of donors who already live in poor conditions
- Red tape faced by willing donors which kills the enthusiasm
- Lack of transparency or awareness

Deceased Donor (Cadaveric) Donation

- Cadaver transplant is a time-tested method where vital organs can be retrieved from a brain-dead person to save several lives. Because of lack of awareness, social/religious beliefs and absence of proactive approach by governments in India, Cadaver Transplants have not picked up pace.
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- It saves precious lives
- Makes absolutely no health impact on the donor
- It can eliminate illegal organ trade
- When aware, several people are willing to donate cadaveric organs
- India lags far behind the world average in such transplantation

Cadaveric Donation in India



From 1995 to 2001 there have been a recorded 426 cadaver transplants in India including kidney (377), heart (34), liver (12), pancreas (2), lungs (1). This averages to just over 50 cadaver organ transplants a year.



Organ Donation: Myth Vs. Reality

Myth: Doctors will not try to save my life if they know I want to be a donor.

Fact: The medical staff trying to save lives is completely separate from the transplant team. Donation takes place only after all efforts to save your life have been exhausted and death has been declared.

Myth: People can recover from brain death.

Fact: People can recover from comas, but not brain death. Coma and brain death are not the same.

Myth: Minorities should refuse to donate because organ distribution discriminates by race.

Fact: Organs are matched by factors, including blood and tissue typing, which can vary by race. Patients are more likely to find matches among donors of their same race or ethnicity.



Organ Donation: Myth Vs. Reality (contd.)

Myth: The rich on the waiting list for organs get preferential treatment.

Fact: Organs are matched by blood and tissue typing, organ size, medical urgency, waiting time and geographic location.

Myth: I am too old to donate organs and tissues.

Fact: People of all ages may be organ and tissue donors. Physical condition, not age, is most important. Physicians will decide whether your organs and tissues can be transplanted at the time of death.

Myth: Donation will disfigure my body.

Fact: A surgical procedure is used to recover donated organs and tissue. The body is always treated with great care and respect. Donation does not delay or change funeral arrangements. An open casket funeral is possible.



Organ Donation: Myth Vs. Reality (contd.)

Myth: Doctor can go wrong in pronouncing a brain death.

Fact: Two different doctors not involved with the patient's treatment (from a panel of doctors as recommended by the Government and from a different hospital) carry out a series of tests to confirm that a patient is "Brain stem dead". The standards are very strict and are accepted medically, legally and ethically all over the world.

Myth: Organ donation may cause pain and inconvenience to my family.

Fact: Organ donation is a lasting consolation. It is often comforting to the family that even though their loved one has died, one or more persons can live on through their gift of life.

Myth: Organ donation may not be approved by my religion.

Fact: All major religions including Hinduism, Protestant, and Roman Catholic, Islam, Buddhism and others fully support organ and tissue donation.



Is there a "right age" for Organ Donation?

Organ	Age
Corneas	0-100 yrs
Heart Valves	0-60 yrs
Trachea	15-60 yrs
Skin	16-85 yrs
Kidneys	0-70 yrs
Heart	0-60 yrs
Lungs	0-60 yrs
Liver	0-70 yrs



Cadaveric Organ Donation: The Steps

Brain Death pronounced after evaluation, testing and documentation

Consent from Family

Information to Organ Procurement Organization (OPO)

Consent from coroner/legal authorities

Organ donor is maintained on ventilator, stabilized with fluids, medications and undergoes numerous laboratory tests

Recipient(s) identified as per waiting list/medical urgency, and matching

Surgical team mobilized

If multiple organ recovery, organs are preserved through special solutions/cold packing.

Donor's body surgically closed and released

Donor's body handed over to family for funeral



Pre-requisites of Cadaveric Donation

The success of the cadaver program depends on various factors:

- Consent by relatives for organ donation in the event of brain death
- Successful Brain Death identification and certification
- Adequate hospital infra-structural and support logistics (adequate Intensive care facilities and fully qualified and trained medical and para-medical staff and motivated medical or social workers who could be trained to speak to the relatives in brain death situations)
- Successful retrieval and transplantation of organs and auditing long term graft outcomes.
- Positive attitude of public towards organ donation

Transplantation of Human Organs Act 1995 (THOA1995)

The aim of the Transplantation of Human Organs Act is “to provide for the regulation of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs”.

Essence of the legislation:

- To accept brain death as also a definition of death
- To stop commercial dealing in organs
- To define the first relative (father, mother, brother, sister, son, daughter and wife) who could donate organs without permission from the government. In event of the donor not being a first relative an approval had to be obtained by a government appointed authorization committee in each state of the country



The Tamil Nadu Cadaver Donation Model

- A best practice example for India and S. Asia.
- Chennai has done the maximum number of cadaver transplants in the country.
- In the last 2 years, deceased organ donation reached 1.3 per million population in Tamil Nadu, thereby effectively eliminating commercial transplantation.
- A central transplant coordinator appointed by the government oversees legitimate and transparent allocation of deceased organs both in the public and private facilities as per the transplant waiting list.
- Guidelines ensure that the process is legal. Priority list exist for hospitals as well as a common list of the State government; Rules exist to guide the allocation of harvested organs.

The Tamil Nadu Cadaver Donation Model (contd.)

- The model takes care of the poor by conducting donation & transplantation through government-run public facilities free of cost.
- The only State in India where Government hospitals do kidney, liver and heart transplantation free of cost and immunosuppressant medication – a costly burden for transplant recipients – provided free for life.
- Every medical set-up with an ICU that can support brain dead patients medically, is authorized to retrieve solid organs. A government doctor qualified to do post-mortem will go to the hospital where the brain dead patient is admitted.
- Clearing the road for any ambulance or private vehicle carrying the deceased donor or retrieved organs. (Real life incident in TN inspired the creation of the popular Malayalam movie "Traffic")

Where does Kerala stand?

- Government Order and detailed guidelines on the following exist:
 - Duties & Responsibilities of Transplant Centres in Hospitals
 - Procedure of Declaration of Brain Death
 - Criteria for non-transplant centres to retrieve organs from brain dead persons
 - Procedure to be adopted by the Government and Private Hospitals approved for Organ Transplantation
- The order makes it mandatory for five government medical colleges in the State, district and general hospitals and private hospitals registered for organ transplantation, to follow the procedures therein.
- A Core Committee has been set up for Cadaver Transplantation under the supervision of the Director of Medical Education and a Cadaver Transplant Advisory Committee headed by the Health Secretary.



Where does Kerala stand?

- Pitfalls in existing formats; streamlining required
- Hospital problem - efforts to identify & maintain brain dead donor
- Community problem - lack of awareness of brain-death concept
- Government problem - no funding
- No measures for encouraging deceased donor transplantation
- No appropriate machinery for implementing and monitoring the scheme of organ donation and transplantation

A Better Tomorrow

No other field of medicine has raised so many ethical, moral, legal and social issues as has organ transplantation.

We are confident that together we can build basic awareness to make our society open to organ donation; make people empathize with a fellow human being in suffering, and remove myths and misinformation on organ donation.

"It is when we give of ourselves that we truly give"

- Kahlil Gibran