

Why Organ Donation Needs to be Promoted All Over the World Especially in Countries with Poor Awareness?

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Background

There is an acute shortage of organs to be donated all over the world, more so in Asian countries especially India. Almost every brain dead patient is a potential donor if the family is sensitised enough. As per the data available with National Organ and Tissue Transplant Organization (NOTTO) of India, about five lakh people need an organ donation per year. About seventeen people die per day in wait for a suitable donor.

About six thousand kidney transplants are done against the requirement of 1.8 lakh per year. The figure is also not encouraging for other organs too. Just 1500 liver transplants are done against the need of about 30000 liver transplants and just ten to 15 hearts are transplanted per year.

Corneal tissue can be donated within 6 - 8 hours of death depending upon the season of the year but only twenty five thousand keratoplasties are performed against the need of more than a lakh surgeries because of shortage of tissue.

Tissues like cornea, blood vessels, bones and skin and heart valves can be donated after cardiac death as they don't require blood supply.

Organs like heart, kidneys, liver, lungs and pancreas can be donated if the patient is declared brain dead.

Organs like kidneys and liver can be donated by live persons.

Auto-grafts are organs or tissues transplanted within the body of same person's body and allografts when transplanted between two persons of the same species.

Because of various myths prevalent in India, not many people come out to pledge their organs and inform health authorities to donate organs in case of a mishap in family.

Landscape of organ donation in India:

- Awareness about the organ donation: 80% (Most are aware only about Cornea, Kidney, Liver and Heart donation)
- Think that organ donation is important: 67%
- Awareness about the process of organ donation: 35%

- Willing to donate: 24%
- Registered for organ/tissue donation: 3% (Though it is easy to pledge the organs online through NOTTO website). <https://www.aspireias.com/daily-news-analysis-current-affairs/Organ-Donation-andTransplantation>.

The legal status in India

Transplantation of Human Organs Act (THOA) 1994 was enacted in India and consequently, the Transplantation of Human Organs (Amendment) Act 2011 was enacted and notified in March 2014 to facilitate retrieval, storage and transplantation of human organs and tissues for treatment purposes and to check the sale of human organs for the prevention of commercial dealings in human organs. <https://vikaspedia.in/health/organ-donation/transplantation-of-human-organs-act-1994#:~:text=The%20Government%20of%20India%20enacted,and%20grandchildren%20in%20the%20list>.

Brain stem death now considered as a legal death in India and about thirty seven different organs and tissues can be donated including kidneys, heart, liver and lungs. After cardiac death cornea, bone, skin and blood vessels can be donated.

Challenges in increased the number of donations and transplants:

1. Myths about organ donation
2. More demand than supply
3. Lack of facilities especially in Govt. sector hospitals
4. Lack of awareness of about brain stem death among stakeholders
5. High cost (especially for uninsured and poor patients)
6. Unregulated private sector.

NOTTO is a centre for coordinating to procure and distribute organs and tissues and maintain record of organs and tissues donation and transplantation in India and deals with:

1. Laying down guidelines and protocols coordinate with regional and state level organizations regional organ and tissue transplant organization (ROTTO) and state organ and tissue transplant organization (SOTTO).
2. Compilation of all data
3. Creating awareness and promotion of organ donation
4. Dissemination of information to all concerned organizations, hospitals and individuals
5. Support on the legal and non-legal aspects of donation and transplantation
6. Capacity building of various related organisations and their staff
7. It maintains the waiting list of patient, hospital wise, organ wise and blood group wise
8. Post-transplant patient's follow up of graft rejection and survival.

There is an acute shortage of all organs in India as the waiting list keeps increasing every day. The deceased organ donation rate is at 0.34 per million population (PMP) which is the lowest in the world, compared to Spain where this figure is 34. The Spain in 1979 moved to a 'soft opt-out' organ donor register, meaning that when someone dies, it is presumed they want to donate their organs, unless they actively opted out of the system when alive. India should explore a similar system which is being adopted in some good performing countries. If deceased donation rates improve to 8 to 9 per million population in India, there will be no need to harvest organs from living donors, and the waiting list will drastically reduce.

The way forward is:

- Spreading awareness about the organ/tissue donation and transplantation right from the school level
- Involving religious leaders and celebrities in spreading awareness and busting myths about organ/tissue donation
- Legislations to make organ donation compulsory after death
- Increased capacity building of staff of ROTTO/SOTTO and government health institutes
- Training of more doctors in organ/tissue transplantation procedures
- Making online organ distribution norms and full details on every organ donation to help build public confidence.

Organ donation statistics

- One organ donor can save 8 lives through organ donation and enhance over 50 lives through tissue donation.
- India has a rate of 0.6 persons as organ donors per million population whereas countries like Spain have almost 50 per million donation rate.
- Brain deaths happens only in 3% to 4% deaths hence only 3 to 4 in 1,000 can donate all organs. Almost every minute someone is added to the transplant waiting list somewhere in the world. In the U.S., 90% of adults support organ donation but only 60% are signed up as donors.
- In India the national register has almost 30,000 people on the waiting list for either a kidney, liver, lungs or heart.
- The majority of organ failures in India do not get any care due to lack of access and financial constraints.
- In India, you can now pledge for organ donation through the driving license.
- All must get registered as an organ donor and motivate others to help spread awareness about this divine gesture.

"Heaven will accept you even without your organs! Donate them!"

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