

3. Legalities Involved in Organ Transplants- Science&Techonology

India's performance in deceased organ donation remains extremely low (0.77 per million in 2023, compared to 49.38 in Spain). Nearly 5 lakh Indians die annually waiting for transplants

Organ Transplantation and Organ Donation in India- Expanded Study Notes

Concept and Scope of Organ Transplantation/Donation

Organ transplantation refers to the surgical removal of an organ, tissue, or group of functioning cells from a donor and their subsequent implantation into a recipient whose organ has failed or is critically damaged. It is a life-saving medical intervention that requires strict ethical, medical, and legal safeguards.

Key components include

Living donation- Kidney, part of liver, and in rare cases lung or pancreas tissue.

Deceased (cadaveric) donation- Multiple organs retrieved upon brainstem death or circulatory death.

Tissue donation- Cornea, skin, bone, heart valves, tendons, etc.

Cell-based donation- Bone marrow, hematopoietic stem cells.

Life-saving potential- A single donor can save up to 8 lives (heart, 2 lungs, liver, 2 kidneys, pancreas, intestines) and enhance the lives of more than 75 people through tissue donation.

Status of Organ Donation in India

Low Donation Rates

India's organ donation rate is less than 1 per million population, significantly lower than countries like Spain (>35 pmp), USA (>30 pmp), and UK (>20 pmp).

Major barriers include lack of awareness, cultural hesitations, fear of misuse, and limited institutional capacity.

Global Ranking

Despite low donation rates, India ranks third globally in total number of transplants conducted, owing to its large population and expanding transplant infrastructure.

Recent Progress

In 2023, over 3 lakh citizens pledged to donate organs via NOTTO, reflecting rising public awareness. Improvement is attributed to better ICU protocols, more transplant centres, and government-led awareness campaigns.

Eligibility and Conditions for Organ Donation

Living Donors

Must be medically fit, mentally sound, and fully informed.

Allowed donation mainly includes one kidney, a portion of the liver, or sometimes a lung lobe.

Legal permissions under THOA ensure-

1. No commercial dealings
2. Informed voluntary consent
3. Evaluation by Authorisation Committees

Deceased Donors

Can donate multiple organs after- Brainstem Death (BSD) certification, Circulatory death (in some cases, depending on protocols)

Requires consent from next of kin unless donor pledged prior to death.

Age Criteria

No strict upper age limit; suitability depends on organ quality.

Even individuals with comorbidities may donate tissues like corneas.

Institutional Framework- NOTTO

The National Organ and Tissue Transplant Organisation (NOTTO) is the apex body responsible for overseeing organ and tissue procurement and allocation in India.

Key Roles and Functions

Develops national policies, guidelines, and protocols for organ donation.

Maintains the National Organ and Tissue Donation and Transplant Registry for transparency.

3 August



Indian Organ Donation Day

Indian Organ Donation Day is observed every year on the 3rd of August, commemorating India's first successful deceased-donor heart transplant on August 3rd, 1994. On this day, people from various organisations around India honour the lives of those who have donated their organs and spark the light of hope both in patients requiring organs and as well as in their families.

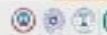


PACE
HOSPITALS

Hyderabad, Telangana, India

040 4848 6868

pacehospital.com



@pacehospitals



Coordinates inter-state organ allocation via a centralized waiting list. Conducts training, capacity-building, and awareness programmes. Monitors transplant activities across India. Supports Regional (ROTTO) and State (SOTTO) networks.

Legal and Regulatory Framework for Organ Transplantation

Transplantation of Human Organs Act (THOA), 1994

First comprehensive legislation regulating organ donation and transplantation.

Key provisions-

1. Legalized Brainstem Death (BSD) as a definition of death.
2. Laid procedures for removal, storage, and transplantation.
3. Prohibited commercial trading in human organs.
4. Established Authorization Committees to approve unrelated donations.

Transplantation of Human Organs (Amendment) Act, 2011

Further strengthened ethical safeguards.

Major additions-

1. Included grandparents and grandchildren in the category of near relatives.
2. Permitted organ swapping (paired exchange/paired donation) between families.
3. Increased penalties for illegal organ trade.
4. Clarified roles of transplant coordinators and hospitals.

Transplantation of Human Organs and Tissues Rules (THOT), 2014

Operational rules for implementing THOA.

Key features-

1. Improved consent procedures for BSD.
2. Simplified authorization for near relatives.
3. Encouraged establishment of Transplant Procurement Management Centres.
4. Strengthened norms to prevent fraud and exploitation.

Awareness Days and Observances in India

Important Dates

World Organ Donation Day- 13 August each year, promoting global awareness.

Indian Organ Donation Day

Earlier celebrated on 27 November. Since 2023, observed on 3 August to mark India's first successful deceased heart transplant (1994).

Organ Donation Month– Designated by NOTTO as July every year.

Challenges in India's Organ Donation Ecosystem

Low public awareness and cultural hesitance toward deceased donation.

Inadequate ICU facilities and trained transplant coordinators.

Misconceptions about brainstem death.

High out-of-pocket expenditure in private hospitals. Illegal organ trade risks despite strong laws.

Geographical disparities in transplant centres (South India accounts for a large share).

Policy Recommendations and Way Forward

Strengthen mandatory brain death certification in hospitals. Establish more SOTTOs and ROTTOs to improve coordination. Expand public funding under Ayushman Bharat for transplant procedures.

Incorporate organ donation education into school curricula. Promote opt-in donor registry and digital donor cards. Encourage partnership between government, NGOs, and private sector.

Source- <https://www.thehindu.com/sci-tech/health/what-are-the-legalities-involved-in-organ-transplants-explained/article70368786.ece>

