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ORGAN DONATION

This article covers "Daily Current Affairs" and the topic details "Organ Donation". The topic "Organ Donation" has relevance in the "Governance and Social Justice" section of the UPSC CSE exam.

For Prelims:

What are different initiatives for Organ Donation?

For Mains:

GS2: Government Policies & Interventions, Health

Why in the news?

Recent data reveals a staggering truth- an overwhelming three lakh patients eagerly await organ donations in India.

Data Insights from the Health Ministry

- The figures have evolved significantly, with organ donors (including deceased donors) increasing from a mere 6,916 in 2014 to a more promising 16,041 in 2022.
- Notable milestones include 1,589 kidney transplants, 761 liver transplants, and 250 heart transplants in the deceased category during 2022.
- The growth continues with kidney and pancreas transplants, soaring from 3 in 2014 to an impressive 22 in 2022.
- A parallel trend is observed in living donor kidney transplants, soaring from 4,884 in 2014 to a commendable 9,834 in 2022.
- The ascent continues with liver transplants, rising from 1,002 to 2,957.

Significance of Organ Donation

- One person who donates organs has the potential to save up to eight lives. For example:
 - two donated kidneys can help two individuals avoid dialysis,
 - a donated liver can be shared by two patients,
 - two lungs can give two more people a new lease on life.
 - a donated pancreas and heart can each save one more person.
- In terms of tissue donation, one person can make a significant impact by donating various tissues like bone, tendons, skin, and more. These donations can potentially benefit up to 75 individuals in need.

The Struggle of Waiting Patients and Organ Scarcity

- The gravity of the situation emerges as we confront a waiting list comprising over three lakh patients, leading to a tragic toll of at least 20 lives lost each day while awaiting organs.
- India grapples with a scarcity of organ donations, particularly deceased donations, which remains a significant challenge.

- Over a decade, India's deceased organ donation rate has hovered below one donor per million. A disconcerting fact is that a new person joins the waiting list every 10 minutes.

Critical Disparity in Kidney Transplants

- A stark disparity between demand and supply in kidney transplants emerges in India.
- The annual requirement for 2,00,000 kidney transplants stands in stark contrast to the meager 10,000 transplants performed yearly, revealing an alarming gap.
- This demand is exacerbated by the shortage of suitable living donors within families.
- An intriguing statistic highlights that around 70% to 75% of donors are female, with wives, mothers, and sisters taking the lead as prominent sources of donation.

Global Lens on Organ Donation

- Globally, a mere 10% of patients in need of organs receive them in a timely manner.
- Contrasting this, countries like Spain and the U.S. have remarkably effective organ donation systems, achieving 30-50 donations per million.

Prominent Government Initiatives to Foster Organ Transplants

India has been actively implementing government initiatives to facilitate organ transplantations, aiming to bridge the gap between demand and availability.

- **National Organ and Tissue Transplant Registry:** This registry serves as a comprehensive repository of organ donation and transplantation records in India, serving as a foundation for developing effective policies and strategies.
- **Organ Retrieval Banking Organization:** Operating under the All India Institute of Medical Sciences (AIIMS) in New Delhi, this organization takes charge of organ retrieval, preservation, and distribution for transplantation within the Delhi-NCR region.
- **National Organ Transplant Programme (NOTP):** Launched in 2014, this program focuses on creating a national registry of organ donors and recipients, expanding the network of organ transplant centers, and raising awareness about the significance of organ donation.
- **Deceased Organ Donation Program:** Spearheaded by the Ministry of Health and Family Welfare, this initiative encourages organ donation from deceased individuals.
- **National Organ Donation Day:** Designated on November 27, this day serves as a rallying point to raise awareness about organ donation's vital importance and motivate people to pledge their organs.
- **Swasth Bharat Yatra:** This government-led campaign aims to promote a healthier lifestyle, prevent lifestyle diseases, and advocate for organ donation, motivating individuals to pledge their organs.
- **Transplantation of Human Organs and Tissues Act (THOTA):** This 1994 act plays a pivotal role in governing organ transplantation, establishing both the National Organ and Tissue Transplant Organization (NOTTO) and State Organ and Tissue Transplant Organizations (SOTTO). Their purpose is to oversee and regulate organ donation and transplantation activities.

Challenges to the Organ Donation

- **Transportation and Preservation Challenges:** The logistics of transporting and preserving organs under precise conditions remain a challenge, particularly for organs with limited shelf lives.
- **Medical Suitability:** Not all donated organs are suitable for transplantation due to medical factors, constraining the pool of available organs.
- **Financial Barriers:** High costs associated with organ transplantation hinder access to treatment for numerous patients.

A multi-pronged approach is essential

- **Ambitious Donation Targets:** The goal should be to amplify organ donations to 65 donations per million population, necessitating the active involvement of public sector healthcare.
- **Engaging Colleges:** Leveraging India's extensive medical college network, encouraging even one donation per college annually could substantially enhance the availability of organs.
- **Training and Awareness:** Equipping trauma and ICU doctors with the skills to guide patients' families toward organ donation is crucial. Given that living donors constitute 85% of all donors in India, such training can be transformative.
- **Materializing Pledges:** Translating organ donation pledges into tangible donations requires education for medical staff. The ability to recognize brain death and communicate its significance effectively is paramount.

In the face of organ scarcity and the poignant stories of patients awaiting transplants, India's strides in organ donation are commendable yet call for continued, concerted efforts. Through robust government initiatives, increased public awareness, and collaborative medical involvement, the nation can bridge the gap between demand and availability, offering countless lives a chance for renewal and hope.

Sources:

Organ shortage continues to cost lives – The Hindu

Q1. With reference Organ Donation, consider the following statements:

1. One person who donates organs has the potential to save up to eight lives.
2. Countries like India and China have remarkably effective organ donation systems, achieving 10-20 donations per million.
3. In India, around 70% to 75% of donors are female, with wives, mothers, and sisters taking the lead as prominent sources of donation.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 3 only
- (d) None

Answer: (c)

Q2. Consider the following pairs:

1. National Organ and Tissue Transplant Registry – A comprehensive repository of organ donation and transplantation records
2. Organ Retrieval Banking Organization – responsible for organ retrieval, preservation, and distribution for transplantation within the Delhi-NCR.
3. National Organ Transplant Programme (NOTP) -a national registry of organ donors and recipients
4. Deceased Organ Donation Program – Operates under the Ministry of Road and Transport for promoting organ donation from deceased individuals due to accidents

How many of the abovementioned pairs are correctly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four

Answer: (c)

Q3. Highlighting the significance of Organ Donation in India, analyse the challenges faced by India and the various government initiatives to improve the status quo.

Organ Donation in India

Waiting Patients and Organ Scarcity

- Over 300,000 patients on waiting list
- New person joins waiting list every 10 minutes
- Scarcity of deceased donations is a challenge
- Around 20 lives lost daily while awaiting organs

Government Initiatives

- Organ Retrieval Banking Organization
- Transplantation of Human Organs and Tissues Act (THOTA)
- Deceased Organ Donation Program
- National Organ Transplant Programme (NOTP)
- Swasth Bharat Yatra campaign
- National Organ and Tissue Transplant Registry
- National Organ Donation Day (Nov 27)

Challenges

- Financial barriers
- Transportation and preservation
- Medical suitability

Solutions

- Materializing pledges through education
- Engage colleges for donations
- Training and awareness for doctors
- Ambitious donation targets (65 donations per million)

Organ Donor Evolution

- Organ donors increased from 6,916 (2014) to 16,041 (2022)
- Living donor kidney transplants increased from 4,884 (2014) to 9,834 (2022)
- Kidney and pancreas transplants rose from 3 (2014) to 22 (2022)
- Liver transplants ascended from 1,002 to 2,957

Significance of Organ Donation

- One donor can save up to eight lives
- Tissue donation impact
 - Bone, tendons, skin, etc. can benefit up to 75 people

Disparity in Kidney Transplants

- Annual performed: 10,000 transplants
- Shortage of suitable living donors
- 70-75% of donors are female
- Annual demand: 200,000 kidney transplants

Global Perspective

- Spain, U.S.: 30-50 donations per million
- Only 10% globally receive needed organs