



Review Article

Systemic Review of Organ Donations in Madhya Pradesh, India: Challenges, Activities and Solutions

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Abstract

Organ donation offers a life-saving intervention for individuals with end-stage organ failure. While India has established a national framework for organ donation through the National Organ Transplant Programme (NOTP) and related legislative acts, the country's donation rates remain considerably low. This paper reviews the NOTP and associated initiatives, examines the status of organ donation in Madhya Pradesh (MP) and its capital, Bhopal, and highlights recent local and national campaigns and activities aimed at increasing donation awareness and rates. Discuss key statistical data for MP. An overview of governmental efforts at both national and state levels to increase number of organ donations, and a discussion of common myths surrounding organ donation are presented. Furthermore, the paper includes a motivating case example from MP and proposes evidence-based strategies to encourage a greater number of individuals to become organ donors. Strategies to encourage organ donation include public awareness campaigns emphasizing altruism and debunking myths, influencing families, public pledges, recognizing donor families, simplifying registration processes, and improving organ retrieval and transport facilities. Ultimately addressing the critical need for encouraging organ donations and transplantation in the region.

Keywords: Organ Donation; Madhya Pradesh; Bhopal; National Organ Transplant Programme; Public Awareness; Transplantation

Introduction

Organ donation represents a profound act of altruism, providing critically ill patients with the possibility of a renewed life. As medical professionals, we witness first-hand the transformative impact of transplantation, restoring health and extending lives. The process involves the surgical retrieval of viable organs or tissues from a deceased or living donor for transplantation into a recipient in need. Strict medical and ethical protocols ensure equitable allocation and respect for donor wishes. By considering organ donation, you possess the remarkable power to leave a legacy of hope.

In India, the legal and programmatic infrastructure for organ donation is continually developing; however, the rate of organ

donation remains significantly below the need. This review aims to provide a comprehensive overview of the landscape of organ donation in India, with a specific focus on Madhya Pradesh (MP) and Bhopal. We will delineate the national framework, assess the current donation scenario in MP, highlight ongoing efforts to promote donation, address prevalent misconceptions, and propose actionable strategies to enhance organ donation rates within the state.

Organ Donation Programmes in India

The legal foundation for organ donation and transplantation in India is the Transplantation of Human Organs and Tissues Act (THOTA), enacted in 1994 and amended in 2014. This legislation permits both deceased and living organ donation and legally recognizes brain death as a form of death, thereby enabling deceased donation. In a significant move to augment deceased organ donation, the Government of India launched the National

Organ Transplant Programme (NOTP) in 2019, backed by substantial financial resources. The NOTP provides funding and support for several key initiatives:

- Establishment of State Organ & Tissue Transplant Organizations (SOTTOs) in all states and union territories.
- Creation of National, Regional, and State Bio-material Centers for the storage of tissues.
- Development of new and strengthening of existing organ transplant and retrieval facilities.
- Appointment of transplant coordinators in medical colleges and trauma centers.
- Provision for the maintenance and transportation of deceased donors, including dignified funeral arrangements.
- Supply of immunosuppressant medications for post-transplant care to patients from low-income backgrounds.

At the apex of this structure is the National Organ and Tissue Transplant Organization (NOTTO), located in New Delhi, which serves as the national registry and coordination center. Supporting NOTTO are five Regional Organ and Tissue Transplant Organizations (ROTOs) and sixteen State Organ and Tissue Transplant Organizations (SOTTOs), responsible for managing organ allocation and logistical aspects within their respective jurisdictions. NOTTO, for instance, operates a national tissue bank, maintains an informative website, and provides a 24x7 toll-free helpline to address donor inquiries. The program also incorporates incentives to encourage donation, such as providing free post-transplant drugs to Below Poverty Line (BPL) donor families and offering official recognition to donors or their families.

Public awareness and outreach form a crucial pillar of the NOTP. The Ministry of Health actively conducts wide-ranging information campaigns, including the annual celebration of Indian Organ Donation Day (August 13th) with seminars and street plays, organizing organ donor rallies and marathons, and disseminating public service messages through television and radio. A recent nationwide initiative, Jan Andolan, leveraged social media as part of India's 75th-anniversary celebrations to garner pledges for organ donation across the country. These multifaceted activities are designed to dispel common myths and increase the number of registered organ donors.

Despite these concerted efforts, India's organ donation rate remains critically low. A recent study indicates a deceased organ donation rate of only 0.26 per million population (pmp) [1]. To provide context, countries like Spain have achieved rates exceeding 35 pmp. Several major barriers contribute to this disparity, including

a lack of widespread public awareness, prevalent religious misconceptions, fear of bodily disfigurement, distrust in the healthcare system, and low rates of family consent for donation. While India performed the second-highest total number of transplants globally in 2019, its per capita rate of approximately 0.65 pmp significantly lags behind that of developed nations.

Organ Donation in Madhya Pradesh and Bhopal

Recent Statistics and Trends

Madhya Pradesh has historically demonstrated lower rates of organ donation compared to many other states in India. Official data reveals that MP's contribution to the national organ transplant pool has been modest [2]. In 2023, MP accounted for only 1.6% of the 16,542 organ transplant procedures performed in India [3]. In 2022, the state contributed just 4.5% of all cadaveric transplants nationwide. While the number of organ donations in MP has been low, there has been a modest upward trend in recent years: 172 organ donations in 2021, 236 in 2022, and 281 in 2023. However, these figures still fall significantly short of the needs of MP's population.

More strikingly, MP recorded only 25 cadaveric donations between January 2018 and June 2023. This was the lowest number among all larger states, except for smaller territories, and significantly lower than states like Telangana (883 cadaveric donations) and Tamil Nadu (713) during the same period [4]. In practical terms, a substantial number of potential donor deaths occur annually in MP due to events such as road accidents or stroke, yet only a small fraction result in organ donation.

Several factors contribute to MP's lower performance. Organ retrieval and transplantation services are primarily concentrated in Bhopal and Indore, leaving most other districts without the necessary specialized facilities or trained medical teams for organ harvesting. Inadequate connectivity and transportation infrastructure in central India further exacerbate delays in donor identification and organ transport. Concerns among hospital administrators regarding strict legal regulations, although many have been recently eased, have also been cited as a contributing factor. Crucially, a lack of public awareness and persistent social stigma remain major impediments in MP. For instance, even in a high-capacity hospital in Bhopal, families declined organ donation in three instances of brain-dead patients within a two-week period. Local health authorities attribute this to prevailing myths and distrust, including fears of organ trafficking, which deter families from providing consent. As one health official aptly stated, "Fundamental challenges persist... healthcare inequalities, coordination deficiencies, and societal stigma... remain substantial impediments."

Campaigns and Activities in MP and Bhopal

In response to these challenges, medical professionals and non-governmental organizations (NGOs) in MP have initiated targeted awareness campaigns. On March 8, 2025, medical professionals in Bhopal organized a car rally to promote organ donation. This rally, spearheaded by the Gandhi Medical College Alumni Association with support from the district health committee and local NGOs, aimed “to create a positive atmosphere for organ donation and highlight its importance.” Such rallies, along with other community-based events like walkathons and street plays, are becoming increasingly common. The state government is actively supporting these efforts through public campaigns and registration drives.

Hospitals and educational institutions are also actively involved. Gandhi Medical College and other institutions regularly conduct seminars, and pledge drives around Indian Organ Donation Day. Various health NGOs, such as the MOHAN Foundation, are working to educate doctors and volunteers within MP. Media coverage featuring individual donor families and transplant recipients plays a vital role in personalizing the message and fostering empathy. The MP health commissioner has announced new guidelines and a commitment to more frequent awareness campaigns, indicating a growing focus on strengthening the state’s organ donation program. Collectively, these activities aim to normalize discussions about organ donation and increase the number of registered donors in MP.

Government Initiatives: National and State

National Initiatives

Beyond the NOTP measures already outlined, the Indian government has implemented several significant policy initiatives to promote organ donation. The Transplantation of Human Organs and Tissues Act was amended in 2011 and 2014 to broaden the scope to include tissue donation and to simplify consent procedures, such as allowing consent by a spouse or close relative. The Ministry of Health provides funding for donor awareness campaigns through various media channels, including print and broadcast advertisements, as well as engagement through sports and cultural events to reach younger demographics. The establishment of “green corridors” in major cities, involving reserved traffic lanes and police escorts, facilitates the rapid transportation of harvested organs to recipients. Crucially, the National Organ and Tissue Transplant Organization (NOTTO) maintains centralized registries of patients awaiting organ transplants, ensuring equity in organ allocation. A 24x7 national helpline and dedicated websites (e.g., www.notto.gov.in) offer comprehensive information on organ donation and transplantation.

State Initiatives (Madhya Pradesh)

The government of Madhya Pradesh has recently introduced notable measures to encourage organ donation. In February 2025, the Chief Minister of MP announced that individuals who pledge to donate their organs will be accorded state honors during their last rites. Additionally, donors or their families will receive posthumous awards during national festivals, providing significant social recognition for this selfless act. The government has also committed to providing air ambulance services (with family consent) for the transportation of donated organs or bodies to expedite the transplant process. These initiatives send a powerful message, emphasizing that organ donors are valued and respected members of society.

At the administrative level, MP’s State Organ and Tissue Transplant Organization (SOTTO) has been staffed and trained to effectively coordinate transplant activities. The state also offers financial incentives, covering the costs of organ retrieval surgery and even the donor’s funeral expenses. Collaborating with the police department, hospitals in MP now routinely establish green corridors for the urgent transport of organs, as demonstrated by the recent successful heart transplant case detailed below. Collectively, these national and state initiatives are designed to reduce barriers and streamline the pathway from organ donation to transplantation.

Challenges: Common Myths and Misconceptions

Despite improvements in policies and increasing awareness efforts, misinformation continues to impede organ donation. It is crucial to directly address common myths with factual information:

● **Myth:** “Organ donation will disfigure the donor’s body.”

○ **Fact:** Organ retrieval is performed with meticulous surgical precision, and the body is treated with respect and prepared normally for burial or cremation. For instance, after eye donation, an artificial eye is fitted, and the eyelids are closed. If bone is donated, a removable prosthesis is used. Consequently, there is no noticeable difference in the appearance of the body after donation.

● **Myth:** “My religion forbids organ donation.”

○ **Fact:** No major religion explicitly prohibits organ donation. In fact, most faiths view it as an act of charity and compassion. Religious leaders from Hinduism, Islam, Christianity, Sikhism, and other faiths have endorsed organ donation as a means of saving lives. There is broad support across religions for the life-saving potential of organ donation.

● **Myth:** “Doctors won’t try as hard to save a donor’s life if they know they are a potential organ donor.”

○ **Fact:** Medical ethics and hospital protocols strictly separate the transplant team from the treating medical team. In any Intensive Care Unit (ICU), the primary focus is always on saving the patient's life. Organ donation is only considered after brain death has been legally and unequivocally confirmed. The treating physicians and the patient's family are never influenced by the patient's potential donor status.

● **Myth:** "Families have to pay for organ donation."

○ **Fact:** Organ donation is an altruistic act, and it is entirely free to the donor's family.

Under Indian law, hospitals are prohibited from charging families for organ recovery. If a family receives a bill in error, it should be reported immediately. Donor families are never billed for the donation process. On the contrary, the government often covers transportation costs and provides medications to the recipient's family in cases of financial need and also offers state honors during donor's last rites and recognition awards to donors.

● **Myth:** "My organs can't be used because of my age or health."

○ **Fact:** There is no strict upper or lower age limit for organ donation. The suitability of organs for transplantation is determined on a case-by-case basis by medical professionals at the time of death. Healthy organs have been successfully transplanted from donors in their 70s and 80s. Conversely, organs from younger donors may sometimes be deemed unsuitable if they are not viable. The transplant team evaluates all relevant criteria, including the donor's age, medical history, and cause of death, before proceeding with retrieval.

● **Myth:** "Only wealthy or well-connected people benefit from organ donation."

○ **Fact:** This is a significant misconception. The national organ allocation policy prioritizes recipients based on medical urgency and waiting time, not on their socioeconomic status. Organ trafficking is illegal and subject to severe legal penalties. Only legitimate, needs-based matching processes are followed. The demand for organ donation is so substantial that organs benefit recipients from all walks of life.

By proactively educating patients and communities with accurate information, medical professionals and health educators can effectively dispel these pervasive fears and misconceptions. Hospitals often provide informational pamphlets and offer counselling sessions to address these myths directly. Encouraging open discussions about organ donation in schools, religious institutions, and community groups can also be highly effective in changing ingrained misconceptions.

Solutions: Influencing Attitudes and Strategies to Increase Donation

Several factors significantly influence an individual's decision to become an organ donor. A recent community-based study in India revealed that the belief that donation "benefits humanity" was a primary motivator for those willing to donate, while family disapproval was the most significant barrier [5]. This underscores the critical roles of altruistic values and family support in the decision-making process. Positive attitudes toward organ donation, shaped by knowledge and cultural acceptance, were found to be statistically linked to a greater willingness to donate. Based on these insights, the following points and strategies can be instrumental in improving organ donation rates in MP:

Education and Awareness: Intensify public awareness campaigns to clearly explain the life-saving impact of organ donation. Schools, colleges, and community centers should host informative talks by medical professionals and transplant recipients. Utilize various media platforms, including television, radio, and social networks, to share compelling real-life stories of donation and transplantation. Campaigns should explicitly address and debunk common myths and emphasize the fact that a single donor can save multiple lives. Health studies recommend integrating comprehensive organ donation education into the curricula of medical and nursing programs to equip future healthcare professionals to effectively advocate for donation.

Family Engagement: Given that family consent is a prerequisite for deceased organ donation, it is crucial to encourage open and proactive family discussions about individual donation wishes. Doctors and counselors should advise patients and their relatives, particularly in critical care settings such as neuro-ICUs, to discuss and document their intentions regarding organ donation. One effective strategy is for individuals to carry a donor card or register online and then explicitly inform their family members of their decision. Encouraging prominent public figures and community leaders to share their own organ donation pledges can help normalize these conversations within families and communities.

Recognition and Incentives: Build upon the recent positive initiatives in MP by publicly honoring donor families for their selfless contributions. The state-level awards and the provision of state honors during the last rites of donors send a powerful message that organ donation is a noble and highly respected act. Hospitals can further reinforce this by holding "gratitude ceremonies" for donor families or by establishing permanent donor recognition walls within their facilities. Exploring tangible incentives, such as providing expedited transplant coordination for individuals who have registered as donors (where ethically permissible and legally sound), could also help encourage registration. Over

time, consistent and meaningful recognition can positively shape societal attitudes toward organ donation.

Simplifying the Process: Make the process of registering as an organ donor as easy and accessible as possible. Provide convenient registration options at the time of driver's license issuance, at voter registration offices, and through user-friendly online portals. Maintain a simple and centralized donor registry to ensure that an individual's intent to donate is immediately known upon their death. For example, digitizing consent forms and enabling instant family consent via tablets in hospital settings can significantly expedite the consent process. Health policy experts recommend simplifying legal requirements and reducing bureaucratic hurdles associated with organ donation.

Efficient Coordination: Ensure the timely and efficient retrieval of organs from deceased donors. Hospitals in MP should maintain enough well-trained transplant coordinators who can manage all logistical aspects of the donation process around the clock. Expanding the network of "green corridors" beyond major metropolitan areas can significantly reduce the time taken to transport organs to recipients. The successful case of airlifting a donor heart to Bhopal (detailed below) clearly demonstrates how effective coordination can save lives. Similarly, establishing a robust hospital-to-hospital communication network, activated immediately upon the confirmation of brain death, can alert nearby transplant centers to prepare potential recipients in a timely manner.

Community Partnerships: Actively collaborate with Non-Governmental Organizations (NGOs), such as the MOHAN Foundation, and various civil society groups to broaden the reach of organ donation awareness and education initiatives. Engage faith-based organizations and social clubs to host organ donation pledge drives and informational sessions. Additionally, explore partnerships with industry and businesses, encouraging companies to promote organ donor registration among their employees as part of their corporate social responsibility programs.

Research and Evaluation: Conduct ongoing research to understand the specific barriers and facilitators of organ donation within the local context of MP. Regularly evaluate the effectiveness of different awareness campaigns and interventions to identify best practices and areas for improvement. Share research findings with healthcare professionals, policymakers, and the public to inform evidence-based strategies for increasing organ donation rates.

Research consistently supports these multifaceted approaches, concluded that targeted interventions, including public campaigns to address myths, simplifying donor registration processes, and promoting family discussions about donation, are strongly recommended to empower both healthcare professionals and the

general public, ultimately leading to an increase in organ donation rates. By strategically leveraging these evidence-based strategies, Madhya Pradesh can gradually transform public attitudes and significantly boost its organ donation numbers.

Inspirational Case Example

To vividly illustrate the profound, life-altering impact of organ donation, consider a recent landmark case in Madhya Pradesh. On January 26, 2025, the All India Institute of Medical Sciences (AIIMS) in Bhopal successfully performed the state's first-ever heart transplant. The donor was a 61-year-old patient from Jabalpur who had been declared brain-dead. His family, in an act of immense generosity and compassion, selflessly donated his heart to a 53-year-old recipient from Itarsi who was suffering from end-stage heart failure. The precious organ was carefully harvested by a team of skilled surgeons and then urgently airlifted to Bhopal, arriving via a meticulously coordinated "green corridor" to ensure minimal transit time and preserve its viability.

Doctors at AIIMS Bhopal hailed this ground-breaking procedure as a "historic moment" for the state and profoundly acknowledged the extraordinary generosity of the donor's family, stating that their "noble decision" directly made it possible to save a life that was otherwise nearing its end. The recipient, who had been facing certain death due to severe heart failure, received the invaluable gift of life through this selfless act of donation. This remarkable case powerfully highlights the tangible human impact of organ donation: one family's courageous and compassionate choice directly translated into another individual receiving a second chance at life. The successful execution of this complex medical procedure – which involved seamless coordination across different cities and medical departments – serves as an inspiring example for others within Madhya Pradesh and unequivocally demonstrates the technical capabilities for advanced transplantation within the state.

Conclusion and Recommendations

Organ donation in Madhya Pradesh stands at a critical juncture. Current statistical data clearly indicate that donation rates remain significantly low when juxtaposed with the pressing needs of patients awaiting life-saving transplants [2]. However, recent positive developments offer a beacon of hope: the state government's commendable recognition program for donors and their families, the successful completion of landmark transplant procedures, and the growing momentum of active awareness campaigns are collectively beginning to reshape the narrative surrounding organ donation in the state.

From a medical perspective, achieving substantially higher organ donation rates in MP will necessitate a comprehensive and multifaceted approach. This includes the continuation and

intensification of public education initiatives to effectively dispel persistent myths and misconceptions, actively engaging families in open and honest discussions about organ donation wishes and further streamlining the often-complex donation process within hospitals and healthcare systems. Healthcare professionals, including doctors, nurses, and allied health staff, hold a pivotal role as educators and passionate advocates for organ donation. They should proactively counsel suitable patients and their families about the profound impact and the legal framework surrounding organ donation, ensuring that families are well-informed and understand its critical importance. Policymakers should also consider further progressive reforms, such as exploring the potential implementation of an opt-out system for organ donation and making strategic investments in the necessary transplant infrastructure across the entire state to ensure equitable access to these life-saving procedures. In summary, significantly increasing organ donation rates in Madhya Pradesh demands a concerted and collaborative effort involving the government, medical institutions, and the general public. By consistently promoting compelling success stories like the heart transplant at AIIMS Bhopal, publicly honouring the selfless contributions of donors and their families and diligently implementing evidence-based strategies informed by both local insights and international best practices [6, 7], we can collectively work towards improving public attitudes and fostering a culture of donation. The ultimate goal is both simple and profoundly vital: to save more lives. Encouraging every willing individual to register as an organ donor – and providing unwavering support to them and their families throughout the donation process – will undoubtedly bring Madhya Pradesh closer to achieving that life-affirming goal.

Key Takeaways

Prioritize comprehensive public education grounded in factual information; actively involve families in the crucial decision-making process regarding donation; ensure meaningful recognition of the extraordinary generosity of donors and their families; and establish efficient and streamlined systems for organ donation and transplantation. These evidence-based steps, firmly supported by the data presented and the inspiring case example, have the potential to significantly turn the tide in Madhya Pradesh's organ donation program.

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