



# Dynamics of Organ Transplantation in a state in Northern India: Unraveling timelines in Government & Private Healthcare Arena

## Authors:

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# Introduction

- ✓ Organ Transplantation is a critical medical procedure that offers a lifeline to patients suffering from end-stage organ failure & has gained prominence as a vital therapeutic option.
- ✓ The dynamics of organ transplantation in Uttar Pradesh, like in many other regions, are influenced by various factors, including government policies, healthcare infrastructure, awareness, and ethical considerations.

# Objectives

- ✓ To assess the variation in dynamics of organ transplantation among the government and private hospitals of U.P.
- ✓ To do Root Cause Analysis of the above mentioned findings.
- ✓ To recommend intervention, so as to increase the transplant rate in the country.

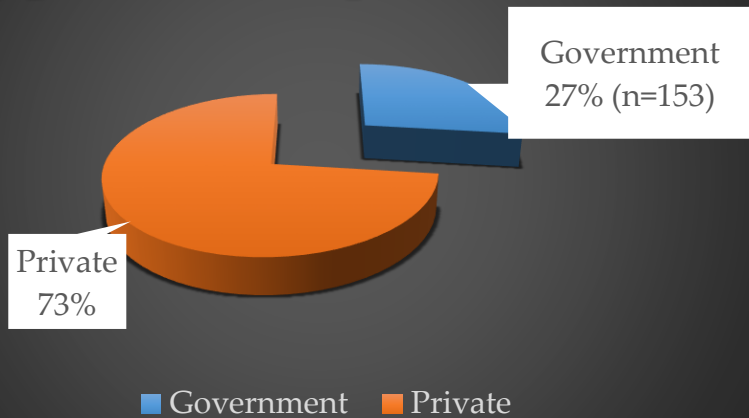


# Methodology

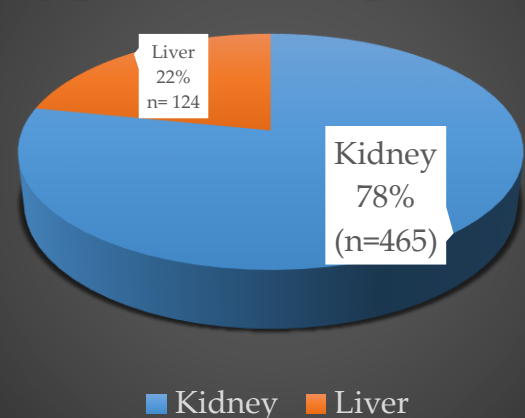
- **Study Design:** Descriptive observational study
- **Study Setting:** All the Transplant centres', registered under State Organ & Tissue Transplant Organization, Uttar Pradesh (SOTTO – U.P.)
- **Study Span:** December 2020 – April 2023
- **Data Collection & Analysis:**
  - ✓ A comprehensive & structured dataset containing the details of the organ transplantations done. For e.g. – type of organ transplantation, type of hospital (govt. or private).
  - ✓ Data were analysed & entered into MS Excel & exported into SPSS version 23 for statistical analysis

# Results

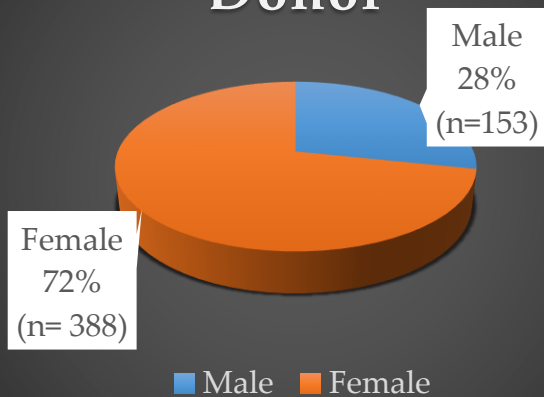
## Type of Transplant centre



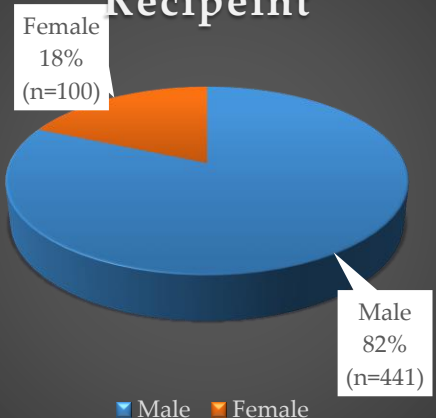
## Type of Transplant



## Donor



## Recipient



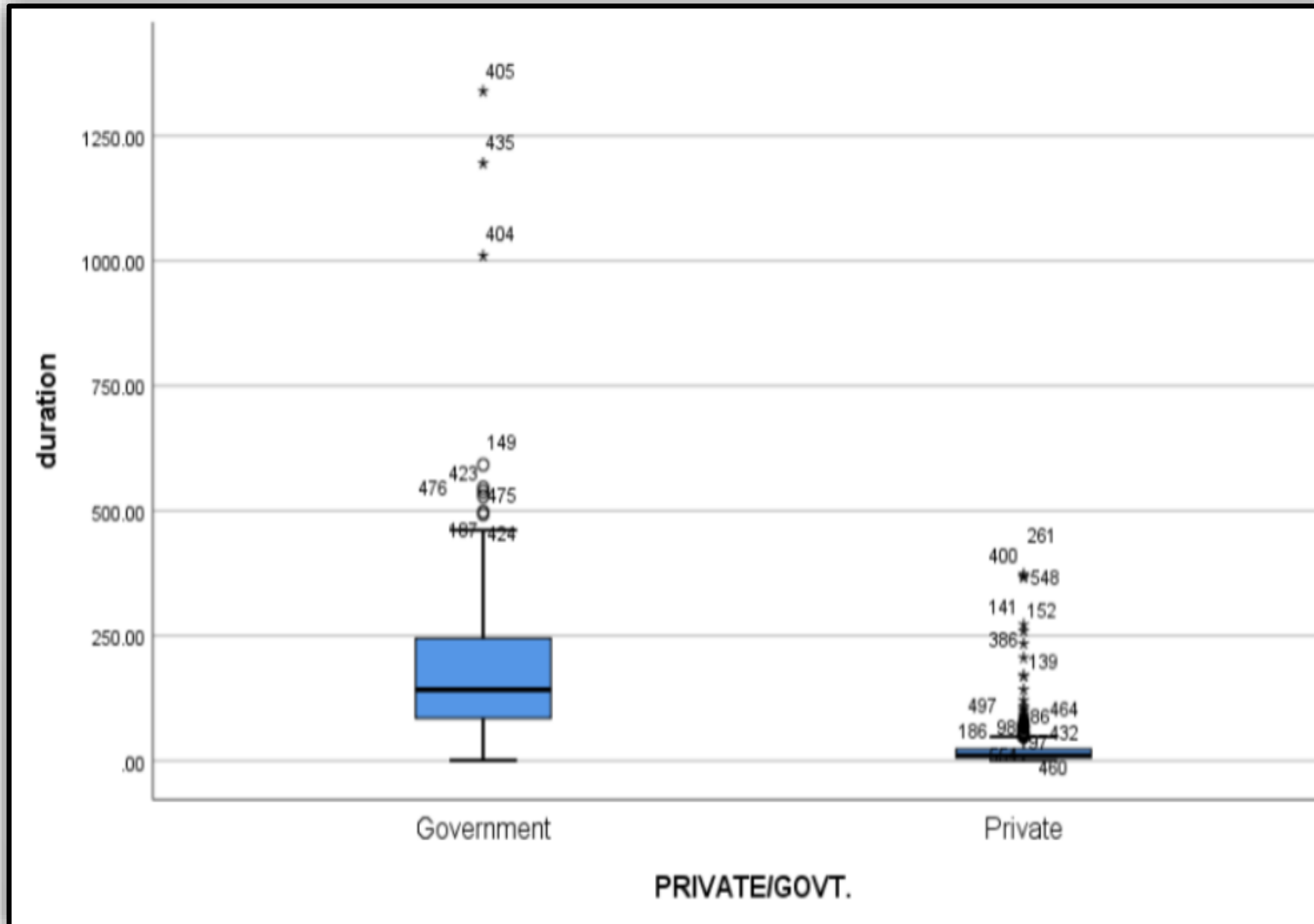


# Results

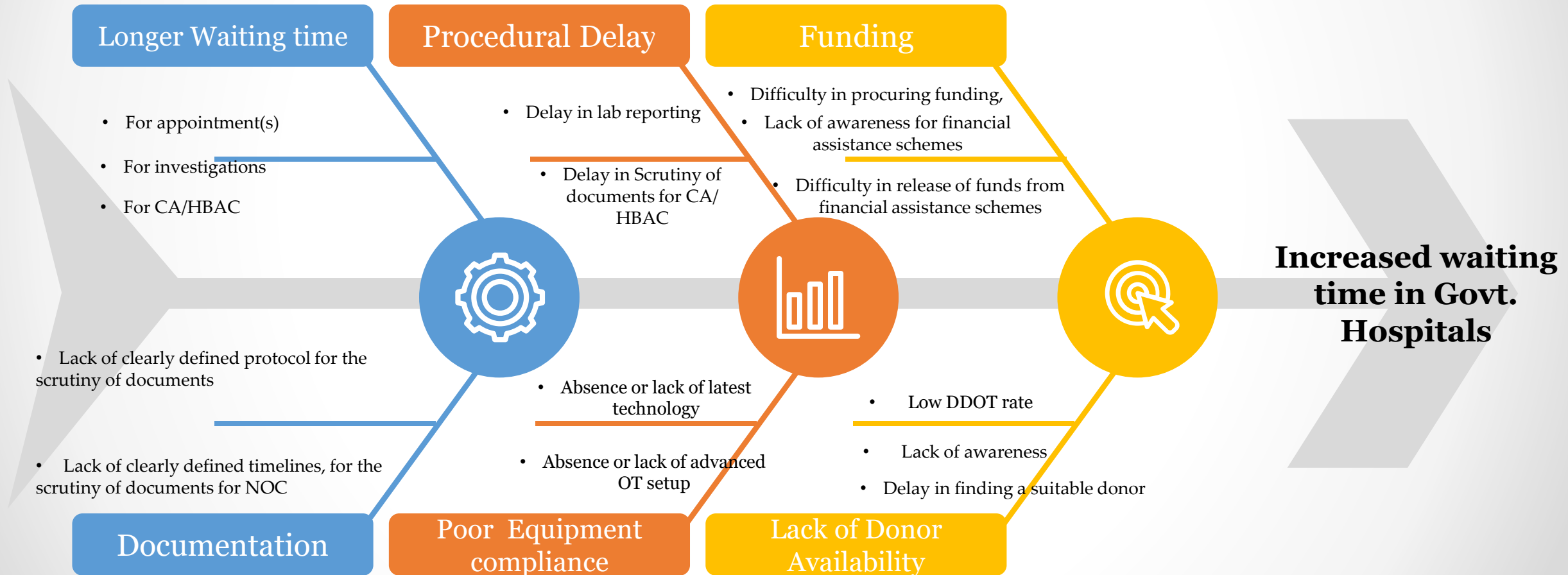
NATIONALITY		Gender of donor	Gender of recipient		Total	
			Male	Female		
Indian	Gender of donor	Male	70	25	95	<0.001
		Female	287	31	318	
	Total		357	56	413	
Others	Gender of donor	Male	42	16	58	0.119
		Female	42	28	70	
	Total		84	44	128	
Total	Gender of donor	Male	112	41	153	0.003
		Female	329	59	388	
	Total		441	100	541	

Nationality			Govt.	Pvt.	Total
			Indian	Count	153
% within PVT./GOVT.	100.00%	68.30%		76.80%	
Others	Count	0	132	132	
	% within PVT./GOVT.	0.00%	31.70%	23.20%	
Total	Count	153	416	569	
	% within PVT./GOVT.	100.00%	100.00%	100.00%	

# Results



# Root Cause Analysis



# Discussion

- **Shroff et al (2021)** mentioned that the advanced living donor infrastructure in India is increasingly accessed by foreigners, and private Indian hospitals are now the preferred destination for transplantation among foreign patients with a living donor but without timely or affordable access to transplant services in their own country of residence. It has been estimated that in some private centers 25–30% of all living donor kidney and liver transplants involve foreigners.
- **Seth et al (2023)** stated that with India spending <2% of its gross domestic product on health care, most government hospitals lack the infrastructure and experienced staff to carry out organ transplantation. Out of 550 transplant centers in the country, 80% are in private hospitals.
- **Balasubramanian et al (2023)** said that the complexities associated with assessing appropriate donor-recipient compatibility and organ scarcity made the transplantation task an arduous process.



# Conclusion

- ✓ The study shows disparities in organ transplantation within U.P., comprehensive reforms necessary to minimize discrepancies and ensure equitable access to transplants for all patients
- ✓ Strengthen public healthcare system, ensuring affordability, and promoting awareness are key steps. Continued efforts in streamlining regulatory procedures and improving infrastructure to foster sustainable ecosystem for organ transplantation
- ✓ The establishment of dedicated transplant centers and the formulation of stringent guidelines for organ allocation and procurement have played pivotal roles in enhancing access to organ transplantation

# Recommendation

- ✓ Increased awareness for DDOT
- ✓ More stringent policy for organ allocation & transplantation
- ✓ Uniformity in Brain Stem Death declaration
- ✓ Accountability of hospitals getting license for organ donation and transplantation and outcome registry
- ✓ We also recommend changes in the daily/monthly reporting format provided by NOTTO.



# Thank You