

## AWARENESS AND ATTITUDE TOWARDS ORGAN DONATION IN URBAN INDIAN POPULATION

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### Abstract

Organ donation is the process when a person allows an organ of their own to be removed and transplanted to another person, legally, either by consent while the donor is alive or dead with the assent of the next of kin. Demand in India for organ donation surpasses its supply and its rate of deceased organ donors stands below one donor per million population. It is believed that significant changes are needed to increase the donor rate in the country. This study was conducted to study the awareness and attitude about organ donation amongst urban population in northern India. A Pre-validated questionnaire was formulated and shared online amongst family and social groups. They were requested to respond to it after registering their informed, free, voluntary consent. The valid responses thus generated were analysed.

**Keywords:** Donation, India, Demand, Surpass

### INTRODUCTION

Organ donation provides a life-saving opportunity for patients with severe organ failure. Although India holds second place in live donor transplants around the globe,<sup>1</sup> the rate of organ donation of the deceased Indian population is exceptionally low (0.26 per million population) accounting for annual mortality of 500,000 people every year owing to the unavailability of organs.<sup>2</sup> There are number of patients who suffer organ failure and need organ transplantation of some other person to continue their life. The need of the organ transplantation can only be fulfilled by the process of organ donation after the brain death. But still the rate of organ donors in our country is very less because of myths and confusions about donating organs.

This disproportionate level in the Indian scenario is due to multiple reasons including but not limited to the lack of public awareness,<sup>3</sup> superstitions or religious beliefs as well as strict laws.<sup>4</sup> Also, lack of system preparedness and inadequate inter-institutional connectivity cause a huge gap in the donation of organs from interested donors as well as willing family members of the deceased individual.<sup>5</sup>

Our nation is struggling with an imbalance between demand and supply of organs for transplantation. The more the number of willing donors, the more are chances of organs being available for patients in need. It has been recorded that out of a million people suffering with end stage organ failure, only 3500 transplants are performed annually. At least 15 patients die every day waiting for organs and every 10 minutes a new name is added to the waiting list. Thus, organ donation is the only way out of this depressing scenario.

Organ donation in today's world is something which is indispensable and moreover lifesaving. Many vital organs without which life cannot be imagined are donated from people who are at the verge of death to those suffering from end stage diseases and permanent organ damage.

This study on Awareness and attitude in urban Indian population about Organ donation intends to know as to what extent people are aware of the importance of organ donation, their perspectives, myths and confusion related to it.

It is imperative considering the huge disparity in demand as compared to the availability of organs for transplant.

### **Aim & Objectives**

Our aim was to spread widespread awareness on the issue of organ donation to be able to accelerate the low rates of organ donation nationwide. The cause of the low rate could either be lack of knowledge, wrong perceptions about the act or religious beliefs among many other reasons.

The recommended solution to every end stage disease is organ transplantation which is the reason behind high demand numbers.

Due to the lack of understanding, those that live in poverty are often exploited by being made to harvest their organs which are then sold illegally at extremely high rates to the needy individuals. The act of organ donation in all circumstances must not be capitalised upon.

In scenarios where the patient's family is willing to donate, the lack of provisions and faulty system often comes in the way of organ transplants. After death, each organ differs in the time of viability which must be met or it will not be useful anymore. The organ to be donated must also be transported in time and in proper conditions to the patient. In metropolitan cities, this system is better regulated and the organisations in charge have proper facilities like "green corridors" to perform such tasks. Airlifts may even be done if needed. However, smaller cities and rural areas are not well equipped for such situations making it harder for people there to make use of such a necessary service.

Many misconceptions exist about organ donation, one of the more popular ones being that organ donation affects cremation or burial arrangements. Another misconception is that the rich are given preference, which is not the case as the severity of illness, time spent waiting, blood type and other medical information are considered. Organ allocation system does not see race, gender, age, income and status. One does not need to be related to the recipient.

In this study, we aim to know the level of awareness in the population about organ donation so that proper measures can be implemented to educate people and remove their misconceptions.

### **OBJECTIVES OF THE STUDY**

1. To assess the awareness about the concept of organ donation.
2. Study the barriers and misconceptions prevalent amongst people who are willing to donate organ.
3. To understand how and why the concept is still not accepted in India completely.

### **MATERIAL & METHOD**

A cross-sectional online survey was conducted between April 2023 and June 2023 at the national level. In this a prevalidated questionnaire was circulated online which included questions related to how much people are aware of Organ Donation, how many of them actually know about it and what are their views on whether people should donate organs or not .This questionnaire was circulated nationally in community to family members ,relatives ,friends via multiple social media portals after recording their informed consent to participate in the study. Motive was to know people's perception and thoughts on organ donation.

**Inclusion criteria:** Indian residents more than 18 years of age.

**Exclusion criteria:** Not willing, no consent, incomplete responses to all the questions

The Snowball sampling technique was used for data collection. Statistical analysis was undertaken using the statistical package for the social sciences (SPSS) software, version 25

### **OBSERVATION & RESULTS**

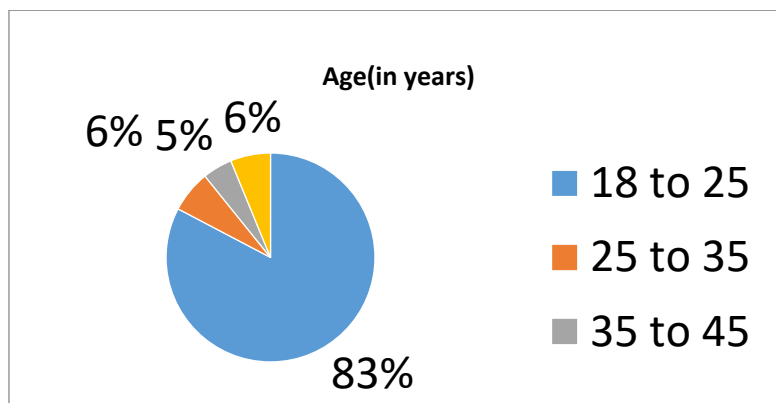
About 140 respondents from the community were part of this study.56 % respondents were male 44 % were females

- 94% of people were aware about organ donation while only 76.7% had heard about body donation
- The source of their information about organ donation is mainly from the newspapers, friends or internet.
- 36.1% were willing to donate but they did not know the process 34.6% need better information and awareness to accept the idea of organ donation
- 39.1% responded may donate organ of their deceased family member if it was up their decision while a 37.6% denied doing so.

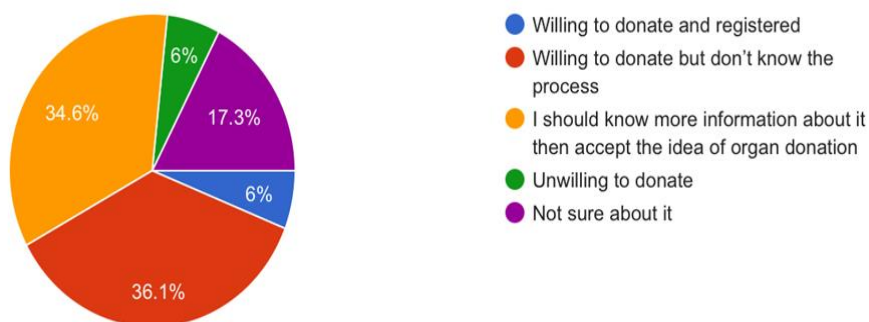
While if the family member has already given consent for organ donation, 80.2% would agree to comply with it.

- 22% respondents agreed that it is important for a person's body to have all of its parts intact when cremated while 23.5% strongly disagreed to it.
- 52.6% strongly disagreed that if they identify themselves to be a donor, doctors would be less likely to try to save your life
- 37.9% were worried that a loved one's body would be disfigured if his or her organs were donated
- 35.6% considered religious attitude and 29.5% considered misuse of donated organs were the major causes when asked about lack of trust in organ donation.
- Clearly only 40.9%, respondents were willing for organ donation after death
- The awareness level regarding organ donation in the community was only 42% .Young adults aged 18-25 years and above had better awareness levels regarding organ donation which was reported as statistically significant ( $p < 0.001$ )

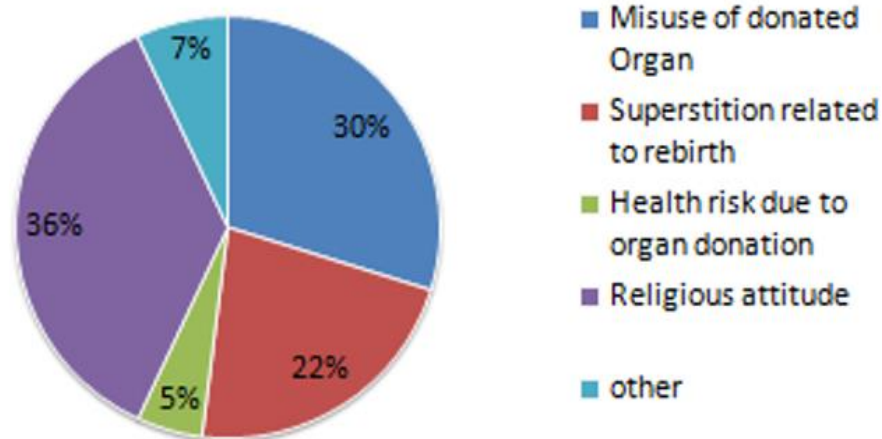
The responses are shown below with the help of pie charts



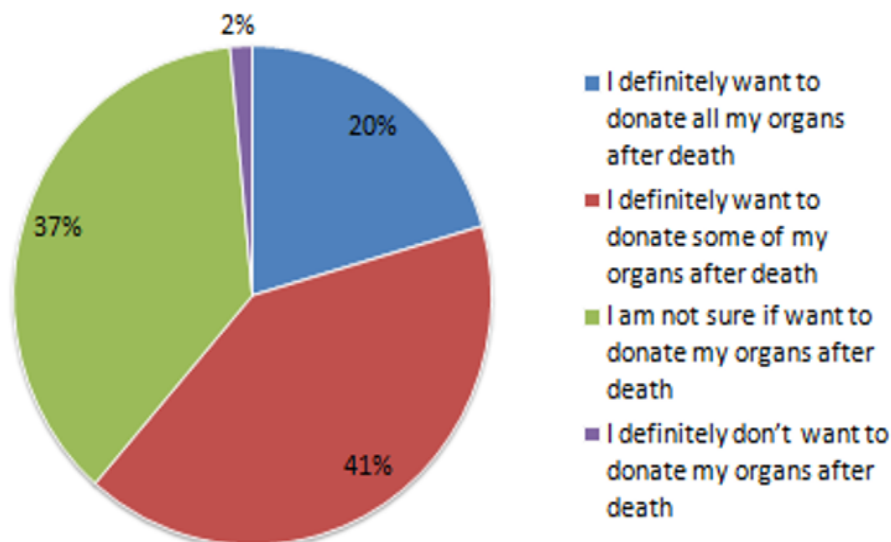
AWARENESS ON ORGAN DONATION



### BARRIERS OF BELIEF IN ORGAN DONATION



### OPINION ON DONATING ORGANS AFTER DEATH



### DISCUSSION

“We make a living by what we get, but we make a life by what we give”— Winston Churchill. Organ transplantation is the most preferred treatment for many of the end-stage organ diseases as it increases life expectancy. Besides long-term survival benefits, organ donation also improves quality of life in many circumstances (for instance, in case of cornea, skin, or bone transplantations) <sup>6</sup>.

In India, a total of 7715 solid organ transplantations were done in 2015 equalling a rate of 5.9 donations per million population, trailing far behind the global trend. Certainly, with 1.3 billion population, India is also lagging behind with respect to deceased organ donation with a rate of <1 per million population. The performance of Tamil Nadu, a southern state in India, deceased organ donation rate (1.3 per million population) was relatively better than the national performance (0.05–0.08 per million population). Although, India falls second in the number of live donor transplants, next only to the USA, but stands nowhere in the list of deceased donor transplantation<sup>7</sup>. Recent studies report that India is in need of 260,000 organs every year, which translates to about 180,000 kidneys, 30,000 livers, and 50,000 hearts, whereas only 6000 kidneys, 1200 livers, and 15 hearts are transplanted annually<sup>8</sup>.

While lack of awareness and negative attitude toward organ donation could be possible reasons for the gap between the need and availability of organs. Lack of awareness about the concept of brain death, religious attitudes, superstition related to rebirth, fear of misuse of organs, health risks due to organ donation, and lack of consensus among family members have been identified as potential barriers for successful implementation of organ donation program in India<sup>9</sup>.

## CONCLUSION

It is clear that the primary obstacle to the organ donation program in India is shortage of donor organs and the main reason behind this is the lack of awareness about this program. Lack of awareness about the concept of brain death, fear of misuse of organs, superstition related to rebirth and religious attitude, risk to health and consensus among family members have been found as major barriers for success of this program in India.

Community awareness about organ donation needs to be enhanced. Strategies may need to be devised and implemented by Government to incentivise first relatives of the deceased and to recognise the contribution of the deceased organ donor. This might go a long way in legally improving organ donation willingness.

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**Conflict of interest:** None

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