

Knowledge and Perception Regarding Organ Donation Among Undergraduate Students

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Abstract

Despite the fact that organ donation is a life-saving act, attitudes and awareness of it still differ greatly. With an emphasis on how variables like educational background and religion may affect their opinions, this study sought to evaluate undergraduate students' knowledge and perceptions of organ donation. Students from different courses were given a structured and validated questionnaire to complete as part of a descriptive cross-sectional study. The demographic information, knowledge of organ donation, and individual perceptions or beliefs were all covered in the questionnaire. The study involved a total of 182 students. While the majority of students, particularly those from healthcare-related fields, had a moderate to high level of awareness, the results indicated that there were still discernible gaps in their knowledge of the legal procedures, including the Human Organ Act (THO) and standards for brain death. It was discovered that a student's willingness to donate was highly influenced by their religious convictions and academic program. Overall, the results indicate that although students are aware of the advantages of organ donation, more work is required to enhance their comprehension of the legal system and address ethical or cultural issues amongst them. Promoting more knowledgeable and optimistic attitudes can be greatly aided by educational initiatives and community service.

Introduction

Organ donation is ethical process whenever a person required an organ of theirs to be replaced, legally, through the consent in case of the person who is donating organ is alive or after death with his approval of the next of kin. Organ transplants commonly involve the kidneys, liver, pancreas, intestines, heart, lungs, bones, bone marrow, skin, and corneas of the eyes. In some cases, living individuals can donate certain organs or tissues—for example, one kidney or a portion of the liver or pancreas. There have also been rare cases where parts of the lungs or intestines have been donated by living donors. However, most organ donations occur after the donor's death. Timely organ donation can significantly reduce the number of deaths caused by organ failure. However, in India very small number of organs are available for transplants in emergency cases.

India's organ donation rate (ODR) is currently 0.34 per million population (PMP), whereas countries like the United Kingdom and the United States have significantly higher rates, around 36 PMP. The judicial foundation for brain death and organ donation, change in 2011, was officially implemented in India, under Transplantation of Human Organs Act (THO). It gives a much-needed legal and transparent system for donation of organ. There are two systems for organ donation practiced worldwide, the family consent system and the presumed consent system(1). It provided a much-needed legal and transparent system for organ donation. States such as Tamil Nadu, Maharashtra, Andhra Pradesh, and Gujarat have taken significant steps to improve their ODR through coordinated efforts between public and private healthcare sectors, such progress is still largely absent in the North-Eastern states, where organ donation remains a distant goal(2).

The legal and ethical principles that currently guide organ donation and transplantation are crucial not only for today but also for the future. These principles may play a key role in addressing complex issues and conflicts arising from emerging fields like cloning, tissue engineering, and stem cell research(3). The young undergraduates can play a vital role in increasing awareness and participation in organ donation by education campaigns, social media advocacy, students club and combating myths and misconceptions. For the transplantation program to be successful, awareness regarding organ donation is needed and people must have a positive attitude toward donating organs(4).

Methodology

The perception and knowledge of organ donation among undergraduate students was assessed using a descriptive cross-sectional survey. A systematic questionnaire was utilized which allowed collection of rapid quantitative data within the allocated timeframe.

The study population comprised students from Manav Rachna Dental College. A total of 182 students from different years and disciplines were included in the study. Participants were recruited using the relevant sampling technique based on the volunteering individuals.

Inclusion criteria:

- Currently enrolled undergraduate students from the institution
- Participants should be willing to take part and give informed consent

Exclusion criteria:

age group above 25 years

To address the study objectives, a self-structured, self administered questionnaire through google forms was designed. It comprised of three section.

1. Demographics (eg. age, gender, academic year, and faculty)
2. Knowledge of Organ Donation (awareness, information sources, eligibility)
3. Perception and Attitudes (donation willingness, ethical concerns, religious or cultural views)

The questionnaire was validated with the ethical committee.

The survey was conducted during a relevant timeframe using google forms. Informed consent was collected from all participants prior to the survey. The data was kept private and confidential throughout the study and the participants were free to withdraw any information at any point making the study entirely voluntary.

RESULTS AND OBSERVATION

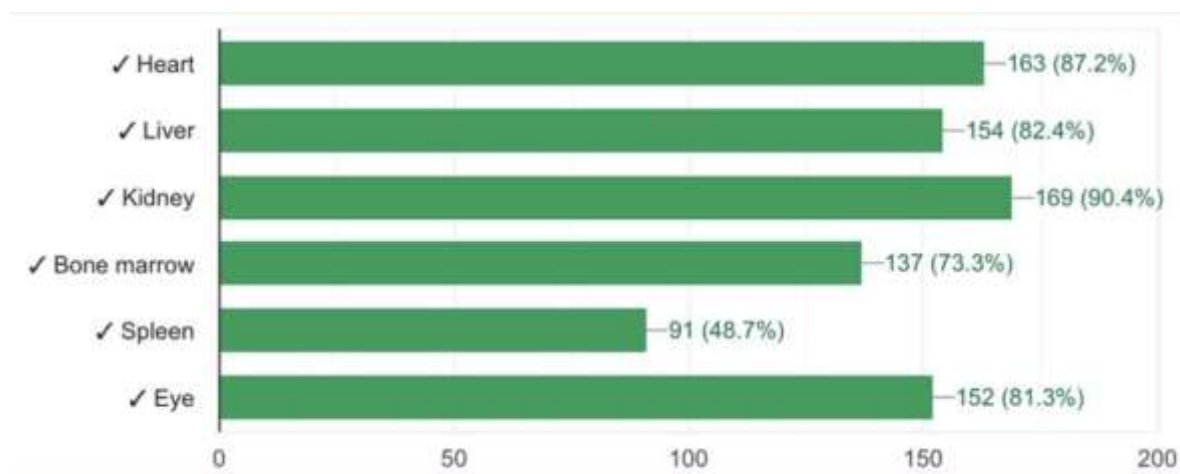
In this study, data from 182 participants (117 females and 65 males) were asked to answer a form to assess their knowledge, attitude, and awareness regarding organ donation. The majority (65.9%) were first-year students, with participants mainly from BDS (58.8%) and BPT (17.6%) courses.

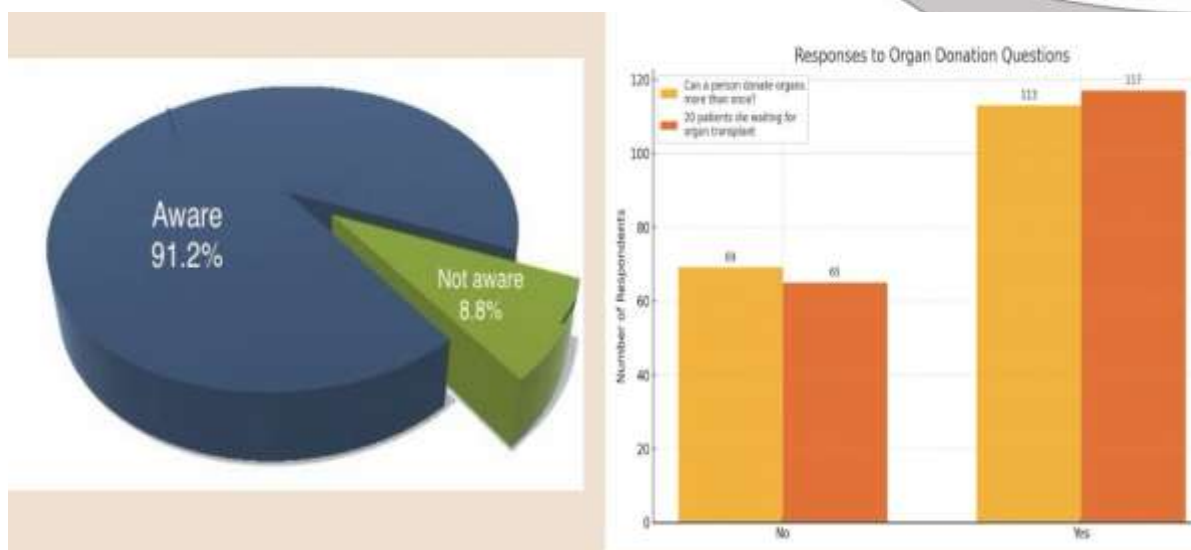
Most participants (91.2%) were familiar with the term "organ donation," and 95.6% are aware that organ donation can save lives. The majority of the students (64.3%) agreed that organs can be donated while being the person is alive. And 62.1% knew that a person can donate organs more than once.

The awareness levels of the students showed the difference based on their academic background. BDS and BPT students showed a higher knowledge scores, with BDS students having a statistically higher mean knowledge score ($p = 0.043$). Religious belief was also marked as a factor influencing organ donation decisions ($p = 0.027$), while the awareness of the Human Organ Act by the students was limited, with only 48.9% being aware of it ($p = 0.023$).

Among the organs which was given as an option on which can be donated, bone marrow (67.6%), heart (61.5%), and eyes (47.3%) were known most commonly. However, there was still confusion about legalities and the minimum age for donation, with only 69.2% correctly identifying 18 years as the legal age.

When asked about willingness to donate in the future, 36.3% said "yes," 31.3% were unsure, and 31.3% said "no." Public education campaigns (61.5%) and personal testimonies (17.6%) were considered the most effective strategies to increase the donation rates.





Discussion

The research emphasizes one major aspect, that is, undergraduate students are knowledgeable but not completely knowledgeable about organ donation. It is impressive to note that the majority of the respondents knew all the major organs that could be donated and realized the importance of organ donation. The medical students were more informed because of their educational background. Nevertheless, very few of them knew about the Human Organ Act or any other related legislation regarding organ donation in India. This shows that even highly educated students are not necessarily aware of the legal knowledge. Also, there was a lack of knowledge regarding brain death certification. Lack of knowledge regarding these important steps in the donation process can lead to hesitancy or inaccuracies. The fact that most participants could name the commonly donated organs and understood the significance of donation is encouraging. Students of health-related courses had a better understanding because of their academic exposure.

However, very few people were aware of the Human Organ Act and other acts which regulate organ transplantation in India. Therefore, it can be assumed that even a well-educated student will lack adequate knowledge in matters of law. There was also a knowledge gap concerning the certification of brain death. Not knowing these important steps in the donation process may lead to hesitation or inaccurate information. Awareness level among students of different educational streams was different with BDS and BPT students coming out on top generally. Another interesting finding was the impact of people's backgrounds and religious beliefs on their attitude. These findings point towards the need of more targeted awareness programs especially with a focus on cultural sensitivity and legal clarity. Conclusion In conclusion, it is encouraging to note that most undergraduate students are aware of organ donation but more needs to be done especially in terms of ethical and legal aspects. Healthcare related students are better informed but others may not be as knowledgeable. Students of different streams of education were having different levels of awareness. BDS and BPT students were scoring generally more. Another interesting finding was how people's backgrounds and religious convictions shaped their views. These findings point to the need for more focused awareness-raising activities, particularly in terms of cultural sensitivity and legal clarity.

Conclusion

In conclusion, it is encouraging that the majority of undergraduate students are aware of organ donation but more needs to be done especially with regard to the ethical and legal considerations. Students that are related to healthcare topics will be better educated; however, other students might lack knowledge about organ donations. This situation can be improved through incorporating organ donation into academic curricula in every field, not only in health care topics. Community and religious leaders can also contribute to spreading awareness regarding organ donation and eliminating myths. Effective community outreach and education will allow us to raise youth's awareness about organ donations.

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