

A Cross-Sectional Study to Assess the Knowledge and Attitude Towards Organ Donation Among Students of Selected Arts and Commerce College in Ahmedabad District

Ahir Radha¹, Bhavsar Prayosha², Prajapati Disha³, Dr Mukta Singh⁴, Varsadiya Aastha⁵, Kanza Husen⁶, Modiya Vipal⁷

^{1,2,3}*TYGNM student, KD Institute of Nursing Sciences, Ahmedabad*

⁴*Vice Principal, KD Institute of Nursing Sciences, Ahmedabad*

^{5,6,7}*TYGNM student, KD Institute of Nursing Sciences, Ahmedabad*

Abstract—Background: Organ donation is a life-saving intervention that enables the transplantation of healthy organs and tissues to patients with end-stage organ failure. Despite advancements in transplantation medicine, India continues to face a significant shortage of donor organs due to limited awareness, misconceptions, cultural beliefs, and inadequate knowledge among the public. College students are an important target population as they can influence their peers, families, and communities in promoting organ donation.

Objectives: To assess the knowledge and attitude regarding organ donation among students of selected Arts and Commerce colleges and to create awareness regarding the importance of organ donation.

Methods: A quantitative approach using a cross-sectional descriptive research design was adopted. The study was conducted among 100 students from selected Arts and Commerce colleges of Ahmedabad District. Participants were selected through a non-probability convenience sampling technique. Data were collected using a structured knowledge questionnaire and a standardized attitude rating scale. The collected data were analyzed using descriptive statistics, including frequency and percentage.

Results: Among the participants, 43% demonstrated good knowledge, 34% had average knowledge, and 23% had poor knowledge regarding organ donation. Regarding attitude, 87% of the students exhibited a favorable attitude, while 13% demonstrated an unfavorable attitude toward organ donation.

Conclusion: Although the majority of students possessed good knowledge and a favorable attitude toward organ donation, knowledge gaps were still

evident among a considerable proportion of participants. Educational programmes, awareness campaigns, and institutional initiatives are recommended to improve knowledge, strengthen positive attitudes, and encourage organ donation practices. Enhancing awareness among young adults may contribute to increasing organ donor registration and help bridge the gap between the demand for and availability of donor organs in India.

Index Terms—Attitude, College Students,, Organ Donation, Knowledge, Ahmedabad

I. INTRODUCTION

Organ donation is defined as "giving an organ or part of an organ to be transplanted into another person" (Organ Procurement and Transplantation Network [OPTN], 2015). It is a life-saving intervention that offers hope to patients suffering from end-stage organ failure by improving both survival and quality of life. Despite remarkable advances in transplantation medicine, the shortage of donor organs remains a major public health challenge worldwide.

In India, nearly 500,000 people die each year due to the non-availability of organs for transplantation, highlighting the urgent need to increase organ donation rates. According to reports published in 2016, India's deceased organ donation rate was only 0.34 per million population, one of the lowest in the world. Organ transplantation in India began in the early 1970s. To regulate organ donation ethically and

legally, the National Organ Transplant Act (NOTA) was introduced in 1984, followed by the Transplantation of Human Organs Act (THOA), 1994, which established legal guidelines to streamline organ donation and transplantation while preventing commercial exploitation and malpractice. In recent years, the demand for organ transplantation has increased substantially due to the rising prevalence of chronic diseases such as diabetes mellitus, cardiovascular diseases, liver disorders, and chronic kidney disease. However, the availability of donor organs has not kept pace with this growing demand, resulting in prolonged waiting periods and preventable deaths among patients requiring transplantation.

According to the National Organ and Tissue Transplant Organization (NOTTO) report (2022), 15,561 organ transplants were performed in India, of which only 2,765 involved organs retrieved from deceased donors. Living donors accounted for 82% of all organ donations, indicating a critical shortage of deceased organ donation. This emphasizes the need for sustained awareness initiatives to improve public understanding and willingness to donate organs.

During community and clinical postings, it was observed that many college students possessed inadequate knowledge and exhibited misconceptions regarding organ donation. Although students represent a highly influential segment of society, many were unaware of the legal, ethical, and medical aspects of organ donation, and unfavorable attitudes were also evident. These observations highlighted the need to assess the knowledge and attitude regarding organ donation among college students. The findings of the study can help identify existing knowledge gaps and provide evidence for developing effective educational interventions to promote organ donation awareness and foster positive attitudes toward organ donation.

II. OBJECTIVES

- 1.To assess the knowledge regarding organ donation among students of selected Arts and Commerce colleges.
- 2.To assess the attitude regarding organ donation among students of selected Arts and Commerce colleges.

- 3.To create awareness regarding the importance of organ donation among students.

III. OPERATIONAL DEFINITION

Assess: Assess refers to determine the knowledge & attitude regarding organ donation among arts and commerce college students.

Knowledge: In this study, knowledge refers to correct information regarding organ donation among arts and commerce college students, measured by questionnaire.

Attitude: In this study, attitude refers to the feeling & belief of college students toward organ donation, measured by 5-point Likert scale.

Organ Donation: In this study, organ donation refers to the act of donating organs as understood and reported by college students.

College Students: In this study, college students refer to male and female students aged above 18 years who are currently enrolled in an undergraduate program in a selected arts and commerce college.

IV. RESEARCH METHODOLOGY

Research Approach: The present study adopted a quantitative research approach.

Research Design: A cross-sectional descriptive research design was used in the present study.

Variables

Demographic Variables: Age, Gender, Class, Stream of education, Religion, Type of family, Previous knowledge about organ donation Source of information.

Sample And Sampling Technique: In this study, the sample were selected from arts and commerce students studying at K.N university faculty of commerce & R.H Patel colleges, Ahmedabad through simple random sampling technique.

DESCRIPTION OF TOOL

Section – A: The first section consists of socio-demographic data which consists of different variables such as; Age, Gender, Class, Stream, Types of College, Area of residence, Type of family, Parents education level, Heard about organ donation, Source of information.

Section – B: The section consists of 22 structured knowledge questionnaires to users the knowledge on organ donation.

Section-C: The section consists of 10 Likert scale questionnaires to users the Attitude on organ donation.

V. RESULTS & DISCUSSION:

I. Analysis and Interpretation Of Knowledge Score

The present study was conducted to assess the knowledge and attitude regarding organ donation among students of selected Arts and Commerce colleges in Ahmedabad District. The findings revealed that 43% of the respondents had good knowledge, 34% had average knowledge, and 23% had poor knowledge regarding organ donation.

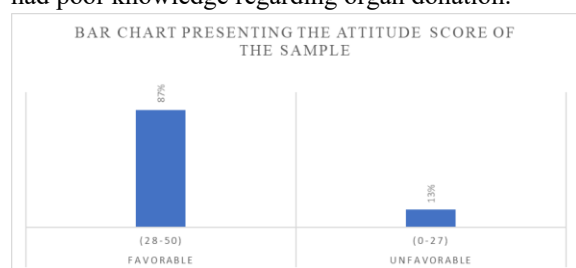


Figure 1: Bar Graph representing the knowledge about organ donation

II. Analysis and Interpretation Of Attitude About Organ Donation Of Sample

In terms of attitude, 87% of the participants demonstrated a favorable attitude, whereas 13% exhibited an unfavorable attitude toward organ donation. Although the majority of students possessed satisfactory knowledge and positive attitudes, the presence of knowledge gaps among nearly one-fourth of the participants indicates the need for continuous educational interventions and awareness programmes.

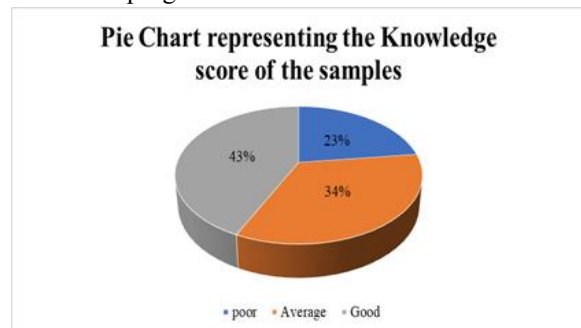


Figure 2 : This pie chart representing the knowledge about organ donation

The findings of the present study are consistent with those of Chakrabarti and Mondal (2025), who

reported satisfactory awareness and positive attitudes toward organ donation among college students while highlighting inadequate knowledge regarding brain death and the influence of family beliefs and religious factors on organ donation decisions. However, the findings contrast with those of Alwahaibi et al. (2021–2022), who observed comparatively lower levels of knowledge and less favorable attitudes among university students in Oman and identified lack of awareness as a major barrier to organ donation. Overall, the findings of the present study emphasize the importance of strengthening educational programmes, awareness campaigns, and dissemination of accurate information through educational institutions and digital media to address misconceptions, improve knowledge, reinforce positive attitudes, and ultimately encourage organ donation.

VI. CONCLUSION

The present study concludes that students demonstrate varying levels of knowledge regarding organ donation. While a considerable proportion (43%) possess good knowledge, a significant number still exhibit average (34%) and poor knowledge (23%), highlighting the need for further educational interventions. This indicates that more structured and effective awareness programs are essential to ensure comprehensive understanding among students. Despite these variations in knowledge levels, the overall attitude toward organ donation among students is largely positive. A majority of students (87%) showed a favorable attitude, whereas only a small proportion (13%) expressed an unfavorable view. This positive inclination suggests that students are generally receptive to the concept of organ donation and may be more willing to participate when provided with appropriate information and guidance.

Therefore, the study emphasizes the importance of implementing targeted educational strategies, awareness campaigns, and motivational initiatives to enhance students' knowledge and reinforce their positive attitudes. Such efforts can play a crucial role in promoting informed decision-making and increasing the acceptance of organ donation in the future, ultimately benefiting society as a whole.

REFERENCES

- [1] Job K. Antony A. Organ Donation and Transplantation: “Life after Death” [Internet]. IntechOpen. IntechOpen; 2018. Available from: <https://www.intechopen.com/books/organ-donation-and-transplantation-current-status-and-future-challenges/organ-donation-and-transplantation-life-after-death>
- [2] Organ Donation – A Noble Act That Can Save Lives! [Internet]. PharmEasy Blog. 2021 Available from: <https://pharmeasy.in/blog/organ-donation-a-noble-act-that-can-save-lives/>
- [3] Milaniak I., Wilczek-Rużyczka E., Wierzbicki K., Sadowski J., Kapelak B., Przybyłowski P. Evaluation of the motivation to consent to and to refuse organ donation among participants of educational meetings concerning organ transplantation. *Transplantation Proceedings* . 2016;48(5):1332–1336.
- [4] Mithra P., Ravindra P., Unnikrishnan B., et al. Perceptions and attitudes towards organ donation among people seeking healthcare in tertiary care centers of coastal South India. *Indian Journal of Palliative Care* . 2013;19(2):83–87. Doi: 10.4103/0973-1075.116701.
- [5] Abraham G., Vijayan M., Gopalakrishnan N., et al. State of deceased donor transplantation in India: a model for developing countries around the world. *World Journal of Transplantation* . 2016;6(2):331–335.
- [6] Job K. Antony A. Organ Donation and Transplantation: “Life after Death” [Internet]. IntechOpen. IntechOpen; 2018. Available from: <https://www.intechopen.com/books/organ-donation-and-transplantation-current-status-and-future-challenges/organ-donation-and-transplantation-life-after-death>
- [7] Desk ITW. World Organ Donation Day 2019: Complete list of body parts allowed for donation [Internet]. India Today. 2019. Available from: <https://www.indiatoday.in/education>
- [8] Directorate General of Health Services: Ministry of Health and Family Welfare: GOI [Internet]. Ministry of Health and Family Welfare GOI. Available from: <https://main.mohfw.gov.in/about-us/directorate-general-health-services/directorate-general-health-services>
- [9] GGTI Activity and Practices [Internet]. World Health Organization. World Health Organization; 2013. Available from: <https://www.who.int/transplantation/ggt/statistics/en/>.
- [10] NDTV, Written By: Aastha Ahuja (2018). Available at <https://sites.ndtv.com/moretogive/india-needs-people-step->
- [11] Vijayabharathi. (2024). A study to assess the effectiveness of structured teaching programme on organ donation among adolescent boys in Hilton Matriculation Higher Secondary School, Chrompet, Chennai. *International Journal of Creative Research Thoughts*
- [12] India Krishna, E., Debbarma, S., Ranjan, A., Pandey, S., Kumar, V., Kumar, V., Singh, M. P., & Yadav, A. (2024).
- [13] Knowledge, Attitudes, and Practices Regarding Organ Donation Among Medical Students in India: A Mixed Methods Study – PMC