

Original Research Article

Knowledge and willingness towards organ donation among undergraduate students: a college-based cross-sectional study

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ABSTRACT

Background: Organ donation is one of the most meaningful ways to save the lives of people with end-stage organ failure. Even with advances in transplantation, the shortage of available organs remains a serious public health concern. Undergraduate students are an important group to engage because, with the right knowledge, they can help spread awareness and encourage positive attitudes toward organ donation in the wider community. Understanding what students know and how willing they are to donate is therefore important for planning effective educational programmes. This study aimed to assess the level of knowledge and willingness regarding organ donation among undergraduate students, examine the association between knowledge and willingness and identify the association of knowledge and willingness with selected socio-demographic variables.

Methods: A quantitative, non-experimental cross-sectional design was used among undergraduate students of Government Degree College, Mishriwala. A total of 100 students were selected through purposive sampling. Data were collected using a self-developed, self-administered questionnaire covering socio-demographic details, knowledge regarding organ donation and willingness to donate. Descriptive and inferential statistics were used for data analysis.

Results: Most participants (78%) had an average level of knowledge regarding organ donation and 44% expressed willingness to donate their organs. Knowledge was significantly associated with age, religion and occupation of the head of the family. Willingness was significantly associated with gender and religion.

Conclusions: The findings suggest that educational interventions addressing misconceptions and highlighting the benefits of organ donation may help improve willingness among young adults.

Keywords: Knowledge, Organ donation, Undergraduate students, Willingness

INTRODUCTION

Organ transplantation has transformed modern healthcare by offering hope and life-saving treatment to patients with end-stage organ failure.¹ Organs such as the kidneys, liver, heart, lungs, pancreas and corneas can greatly improve survival and quality of life. However, transplantation is possible only when suitable organs are available, making organ donation an essential part of this process. In India, the need for organs continues to be much greater than their availability.² Although the

transplantation of human organs and tissues act provides a legal framework for organ donation, public participation remains limited. Many people hesitate because of poor awareness, misconceptions, religious concerns, fear of misuse, limited understanding of the donation process and cultural beliefs. College students are young, educated and socially active and they can play an important role in shaping opinions about organ donation. They often receive information through educational institutions, digital platforms, peers and healthcare professionals. Studying their knowledge and willingness can help in designing awareness programmes that are practical,

reliable and effective.³ Several studies have examined awareness of organ donation among students and healthcare-related groups. However, there is limited information about undergraduate students in Jammu. This study was therefore conducted to understand their level of knowledge and willingness regarding organ donation.⁴

Statement of the problem

A study to assess the knowledge and willingness regarding organ donation among undergraduate students of Government Degree College, Mishriwala.

Objectives

To assess the level of knowledge and willingness regarding organ donation among undergraduate students. To determine the association between knowledge and willingness regarding organ donation. To determine the association between knowledge and selected socio-demographic variables. To determine the association between willingness and selected socio-demographic variables.

METHODS

A quantitative research approach with a non-experimental cross-sectional design was used for the study. The study was conducted among undergraduate students of Government Degree College, Mishriwala. The population included undergraduate students who were enrolled during the period of data collection. A total of 100 students were selected using purposive sampling. Students who were available during data collection and willing to participate were included, while students who had already registered as organ donors were excluded. Data were collected using a self-structured questionnaire with three sections. Section I included socio-demographic

characteristics such as age, gender, religion, year of study, residence, family income and occupation of the head of the family. Section II included structured questions on knowledge regarding organ donation. Section III assessed willingness regarding organ donation. Each correct knowledge response was given one mark and incorrect responses were given zero marks. The total knowledge score was classified as below average, average or above average according to predetermined criteria. The tool was validated by experts in nursing and public health and reliability was established before data collection. Permission was obtained from the college authorities and written informed consent was taken from all participants. Confidentiality and anonymity were maintained throughout the study. Data was collected in the month of March 2026. Data were analysed using descriptive statistics, including frequency, percentage, mean and standard deviation and inferential statistics, including the Chi-square test. Statistical significance was considered at $p < 0.05$.

RESULTS

Most undergraduate students had an average level of knowledge regarding organ donation. A smaller number had above-average knowledge, while few students had below-average knowledge.

Nearly half of the students were willing to donate their organs. However, some students were not willing and others were still unsure about making a decision. A chi-square test of independence showed a significant association between knowledge and willingness (11.091, $df=4$, $p < 0.05$). There was a significant association between age, religion and occupation of head of the family with the level of knowledge. There was a significant association between gender and religion with willingness.

Table 1: Distribution of students according to level of knowledge regarding organ donation.

Knowledge level	Frequency (f)	(%)
Below average	10	10
Average	78	78
Above average	12	12
Total	100	100

Table 2: Distribution of students according to willingness regarding organ donation.

Willingness	Frequency (f)	(%)
Willing	44	44
Not willing	36	36
Unable to decide	20	20
Total	100	100

DISCUSSION

The present study showed that most undergraduate students had an average level of knowledge regarding

organ donation. While many students were willing to donate, a considerable number were either unwilling or undecided. This indicates that knowledge is important, but it may not be the only factor that shapes willingness.

Personal beliefs, cultural values, family influence, fear and misconceptions may also affect a student's decision about organ donation.⁹ The significant association between knowledge and willingness suggests that better awareness may encourage students to think more positively about organ donation. Structured teaching programmes and awareness activities may help students understand the importance of donation and reduce doubts or fears. Previous studies have also reported that students with better knowledge are more likely to show willingness to donate organs.¹¹

The association of knowledge with socio-demographic variables shows that factors such as age, religion and family background may influence awareness about organ donation. Similarly, the association of willingness with gender and religion suggests that educational messages should be sensitive to cultural and personal beliefs. Awareness programmes should therefore be designed in a way that respects students' concerns while providing clear and accurate information.¹²

Colleges, healthcare professionals, social media platforms and community programmes can all help spread correct information about organ donation. Such efforts can address myths, answer common questions and support students in making informed decisions.¹⁵

Implications

Community health nurses can organize awareness programmes on organ donation in colleges. Nurse educators should integrate organ donation education into undergraduate curricula. Nursing administrators should collaborate with transplant organizations to conduct donor awareness campaigns. Nursing researchers should undertake multicentre studies to identify barriers influencing organ donation. Community health nurses can motivate families and communities to participate in organ donation programmes.

Limitations

The study was confined to one college. Purposive sampling limits generalizability. Self-reported responses may be subject to response bias. The study assessed willingness rather than actual donor registration.

CONCLUSION

The study found that undergraduate students had moderate knowledge regarding organ donation and nearly half were willing to donate their organs. The significant association between knowledge and willingness shows that awareness can influence students' views and decisions about organ donation. Targeted awareness programmes that address misconceptions, explain the donation process and highlight the benefits of organ donation may help improve donor registration among young adults.

Recommendations

Conduct multicentre studies with larger sample sizes. Evaluate the effectiveness of educational interventions on organ donation. Assess long-term retention of knowledge following awareness programmes. Explore psychological, religious and cultural determinants influencing organ donation decisions.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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