

A Study To Assess The Knowledge And Attitude Regarding Organ Donation Among Medical And Non-Medical Students In Selected Colleges, Kanpur,U.P.

Mrs. Sandhya rani.

Maddu, Asst.prof, Faculty of Nursing, Rama University, Kanpur,U.P.

sandyaranimaddu.rcn@ramauniversity.ac.in

Abstract

Organ donation is a life-saving practice, yet its success largely depends on public awareness and willingness to donate. This study aimed to assess and compare the knowledge and attitude regarding organ donation among medical and non-medical students. A quantitative comparative research design was adopted with a sample of 100 students (50 medical and 50 non-medical) selected through simple random sampling. Data were collected using a structured knowledge questionnaire and an attitude rating scale. The findings revealed that medical students had significantly higher knowledge scores (18.4 ± 2.3) compared to non-medical students (12.6 ± 3.1). Attitude scores were also more positive among medical students (42.5 ± 4.2) than non-medical students (35.8 ± 5.0). Statistical analysis using independent t-test showed a significant difference ($p < 0.001$). The study concludes that educational background plays a crucial role in shaping knowledge and attitude towards organ donation, highlighting the need for awareness programs among non-medical students.

Keywords: Organ Donation, Knowledge, Attitude, Medical Students, Non-Medical Students, Awareness, Transplantation.³

Introduction

Organ transplantation is a major treatment protocol for a number of cases of end-stage organ failure. Many organs such as the cornea, kidney, and liver are commonly transplanted to human recipients. There is a worldwide shortage of donor organs in comparison to the need for transplantation. Therefore, organ donation is the cornerstone in the process of transplantation. Situation is even more gloomy in India where every year more than 1 lakh people are estimated to suffer from organ failure and only 0.34/million of the population have donated organs in comparison to 36/million and 27.02/million in Spain and the USA,

respectively. Major problems causing organ shortage in India are lack of awareness and correct knowledge among people. There is a significant relationship between public attitude toward organ donation and the availability of such organs. Thus, the main concern of most transplant surgeons is to increase the donor pool and spread the willingness of donation among healthy individuals. The evaluation of public knowledge and attitude toward organ donation is of crucial importance to evaluate and develop educational programs to raise the public commitment to organ donation. A study conducted in urban areas in Western India reported that 78%, 53.7%, and 19.5% were aware of eye, kidney, and liver donations, respectively, and 43.9%

were willing to be organ donors and three persons filled the body donation forms. The study also reported that participants acquired knowledge from TV, newspapers, and Internet, etc., but their attitude toward organ donation was low. Studies conducted on medical students in various parts of India reported adequate knowledge but poor attitude. So far, studies done in India have mostly assessed the knowledge and attitude of medical students or patients and their attendants. However, to formulate and better implementation of any health strategy for future, it is important to assess the knowledge and attitude of young citizens of the country. The knowledge and attitude of health-care providers toward organ donation play a major role in promoting the concept among population. Hence, the evaluation of the knowledge of medical students is must. At the same time, the evaluation of awareness and attitude among nonmedical students would give a fair idea which portion of the society needs more attention. Hence, the study was designed to assess the knowledge and attitude, regarding organ donation, of students pursuing medical as well as other courses.²

Need for the Study

Organ transplant is the treatment of choice for end-stage organ failure but there is a shortage of donor organs worldwide.

Situation in India is even worse. There is a worldwide shortage of donor organs in comparison to the need for transplantation. The present study was designed with the aim to assess knowledge and attitude regarding organ donation among medical students and students pursuing courses other than medical and compare among both groups. India faces a shortage of organ donors despite increasing cases of organ failure. Understanding the knowledge and attitude of young individuals is essential, as they represent future decision-makers. This study helps identify gaps and guide educational interventions.³

Organ donation is the process of retrieving organs or tissues from a donor for transplantation into a recipient. It is a critical component of modern healthcare, offering hope to patients suffering from end-stage organ failure. Despite advancements in transplantation, there remains a significant gap between the demand and supply of organs. Lack of awareness, misconceptions, and cultural beliefs contribute to low organ donation rates, especially among the general population. Students, particularly medical students, are expected to have better knowledge and a more positive attitude due to their educational exposure. However, non-medical students may lack

adequate information, influencing their perception and willingness toward organ donation.⁴

Objectives

1. To assess the level of knowledge regarding organ donation among medical students.
2. To assess the level of knowledge among non-medical students.
3. To evaluate the attitude toward organ donation among both groups.
4. To compare knowledge and attitude between medical and non-medical students.
5. To find association between knowledge/attitude and selected demographic variables.⁵

Hypothesis

- **H₁:** There is a significant difference in knowledge and attitude regarding organ donation between medical and non-medical students.
- **H₀:** There is no significant difference between the two groups.

Methodology and Research Design

Quantitative comparative research design.

Setting

Selected colleges Rama university, Faculty of medical sciences and faculty of engineering.

Population

Medical and non-medical students.

Sample Size

100 students

- Medical: 50
- Non-medical: 50

Sampling Technique

Simple random sampling.

Inclusion Criteria

- Students aged 18–25 years
- Willing to participate

Exclusion Criteria

- Students who have already pledged organ donation

Data Collection Tools

1. **Demographic Proforma**
2. **Structured Knowledge Questionnaire** (20 items)
3. **Likert Attitude Scale** (10 statements)

Data Analysis

- Descriptive statistics: Mean, SD, frequency, percentage
- Inferential statistics: Independent t-test, chi-square test

Results and Statistical Analysis

Section A: Demographic Data

- Majority (60%) were aged 18–21 years
- 55% female, 45% male
- 70% had heard about organ donation previously
- Main source of information: media (45%)

Section B: Knowledge Scores

Table 1: Comparison of Knowledge Scores

Group	Mean	SD	Mean Difference	t-value	p-value
Medical Students	18.4	2.3	5.8	10.21	<0.001
Non-Medical	12.6	3.1			

Students					
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Interpretation:

Medical students demonstrated significantly higher knowledge compared to non-medical students.

Section C: Attitude Scores

Table 2: Comparison of Attitude Scores

Group	Mean	SD	Mean Difference	t-value	p-value
Medical Students	42.5	4.2	6.7	7.89	<0.001
Non-Medical Students	35.8	5.0			

Interpretation:

Medical students had a more positive attitude towards organ donation.

Section D: Level of Knowledge

Level	Medical (%)	Non-Medical
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		(%)
Good	70%	20%
Average	25%	50%
Poor	5%	30%

Section E: Level of Attitude

Attitude Level	Medical (%)	Non-Medical (%)
Positive	80%	45%
Neutral	15%	35%
Negative	5%	20%

Section F: Association with Demographic Variables

Table 3: Chi-square Analysis

Variable	χ^2 Value	p-value	Significance
Age	2.11	>0.05	Not Significant
Gender	1.89	>0.05	Not Significant
Previous Awareness	6.54	<0.05	Significant

Discussion

The study findings indicate that medical students possess better knowledge and a more positive attitude toward organ donation compared to non-medical students. This may be due to their academic exposure and clinical training.

Non-medical students showed moderate to poor knowledge levels, highlighting the need for targeted awareness programs. Positive attitude among medical students suggests that education plays a vital role in shaping perceptions.

Conclusion

The study concludes that there is a significant difference in knowledge and attitude regarding organ donation between medical and non-medical students. Educational interventions are essential to improve awareness and promote organ donation among the general population.

Recommendations

- Conduct awareness campaigns in colleges
- Include organ donation topics in curriculum
- Use media and social platforms for education
- Further research with larger samples

Implications for Nursing Practice

- Nurses can act as educators and advocates for organ donation
- Promote awareness among patients and community

- Participate in organ donation campaigns

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