

Knowledge and Attitude of Undergraduate Nursing Students towards Organ Donation

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ABSTRACT

Organ donation is the donation of an organ of a human body from a living or dead person to a living recipient in need of a transplantation. It is the gift of an individual to help someone who suffers from damage and gross malfunction of their organs. Organ transplantation has greatly improved the looks of patients suffering from end-stage organ failure. The present study aimed to assess the knowledge and attitude of undergraduate nursing students towards organ donation at selected nursing colleges in Kozhikode district. The objectives of the study were to assess the level of knowledge and the attitude of undergraduate nursing students towards organ donation and to find the association between selected demographic variables with knowledge and attitude. The study was based on theory of planned behaviour. One hundred sample were selected using a non-probability convenience sampling technique. The tool used were a socio-demographic Performa, self-structured questionnaires and an attitude scale. The data were tabulated and analysed. The study revealed that among 100 sample, 28% had excellent knowledge, 31% had very good knowledge, 26% had good knowledge, 14% had average knowledge and 1% had poor knowledge. 26% had very positive attitude, 61% had favourable attitude and 13% had neutral attitude. There was significant relationship between monthly family income and previous knowledge on organ donation with the level of knowledge.

Keywords: Knowledge, Attitude, Organ donation, Undergraduate nursing students.

INTRODUCTION

Organ donation is the donation of a human organ from a living or deceased person to a living recipient in need of a transplant. It is a generous act by an individual to help someone suffering from severe damage or malfunction of their organs. Organ transplantation has significantly improved the lives of patients with end-stage organ failure. Although it is now a routine, life-saving procedure, the demand for organs far exceeds the supply. When organs such as the heart, kidneys, or liver fail and no effective drugs are available, transplantation may be the only viable option. The modern era of transplantation began with advances in tissue matching and the development of immunosuppressant drugs that suppress the immune response. These improvements have greatly reduced the risk of organ rejection, although patients must still remain under careful observation. Individuals who wish to donate functional organs—such as the heart, corneas, liver, lungs, and kidneys—can complete an organ donor consent card. The family of a brain-dead patient may also choose to donate the patient's functional organs. Nurses should be prepared to discuss donation options and provide consent forms to interested patients and their families. Until recently, most organs were retrieved from patients who were declared brain-dead. However, new protocols for retrieving organs from non-heart-beating cadavers have introduced several ethical and clinical concerns. The National Organ Transplant Act (1984) prohibits the purchase or sale of organs and provides civil and criminal immunity to hospitals and healthcare providers who act in accordance with the law. In India, only a few studies have explored organ donation awareness among undergraduate students in medical and paramedical health sciences. Therefore, the present study aims to assess the knowledge and attitudes of Indian undergraduate students regarding organ donation^{1,2,3,4,5}.

Problem Statement

A Study to assess the knowledge and attitude of undergraduate nursing students towards organ donation at selected nursing college in Kozhikode district.

Objectives

- To assess the level of knowledge regarding organ donation among undergraduate nursing students
- To assess the attitude of undergraduate nursing students towards organ donation
- To find the association between knowledge regarding organ donation and selected demographic variables
- To find the association between attitude of undergraduate nursing students towards organ donation and selected demographic variables

Hypothesis

H₁: - there is a significant association between knowledge of undergraduate nursing students toward organ donation and selected demographic variable.

H₂: - there is a significant association between attitude of undergraduate nursing students toward organ donation and selected demographic variable.

Conceptual Framework

The study was based on theory of planned behaviour.

METHODOLOGY

Research Approach - Quantitative research approach

Research Design Non-experimental research design (descriptive design).

Population- The Population selected for the present study is BSc nursing students in selected nursing colleges in Kozhikode.

Sample size: 100

Sampling Technique - non-probability convenience sampling technique

Settings of The Study- KMCT College of Nursing, Kozhikode

Variables: Knowledge and attitude of undergraduate nursing students

Demographic variables: Age, gender, year of the study, religion, monthly family income, type of family, type of residency, previous knowledge on organ donation and source of information.

Tool

Section A- Demographic Data

It consists of 11 questions to collect Age, religion, education, occupation, type of family, number of children, age of children, gender of children, monthly income, family history of substance abuse, and relationship between family members

Section B – Self Structured Questionnaire

It consists of 10 questions to assess the knowledge of undergraduate nursing students towards organ donation

Section C – Attitude Scale

It consists of 10 questions to assess the attitude of undergraduate nursing students towards organ donation.

Data Collection

Data collection was started after obtaining clearance from research review committee. The subjects were selected by non-probability convenience sampling

Ethical Considerations

The research proposal was presented before the Research Review Committee of KMCT College of Nursing, and approval was obtained. Ethical clearance for the study was also secured. Subsequently, permission was obtained from the KMCT Research Review Committee. Informed consent was obtained from the participants.

RESULTS

Out of 100 participants, 85% were aged 21–22 years, 6% were aged 18–20 years, and 9% were aged 23–24 years. The majority were female (76%), while 24% were male. Regarding academic year, 58% were in the 6th semester and 42% in the 7th semester. In terms of religion, 53% were Muslim, 38% Hindu, and 9% Christian. Monthly family income was up to ₹10,000 for 43% of participants, ₹10,001–25,000 for 26%, ₹25,001–50,000 for 14%, and above ₹50,000 for 17%. Most participants belonged to nuclear families (81%), followed by joint families (16%) and extended families (3%). In terms of residence, 53% were from rural areas, 46% from urban areas, and 1% from slum areas. A large majority (89%) had previous knowledge of organ donation, while 11% did not. The main sources of information were mass media (68%), health professionals (18%), peer groups (12%), and other sources (2%).

Table 1: Frequency and percentage distribution of the sample characteristics

| SI NO | Demographic characteristics | | Frequency (f) | Percentage (%) |
|-------|-----------------------------|--------------------------|---------------|----------------|
| 01 | Age | 18-20 years | 6 | 6% |
| | | 21-22 years | 85 | 85% |
| | | 23-24 years | 9 | 9% |
| | | 24 above | | |
| 02 | Gender | Male | 24 | 24% |
| | | Female | 76 | 76% |
| | | Prefer not to say | | |
| 03 | Year of the study | 6 th semester | 58 | 58% |
| | | 7 th semester | 42 | 42% |
| 04 | Religion | Hindu | 38 | 38% |
| | | Christian | 9 | 9% |
| | | Muslim | 53 | 53% |

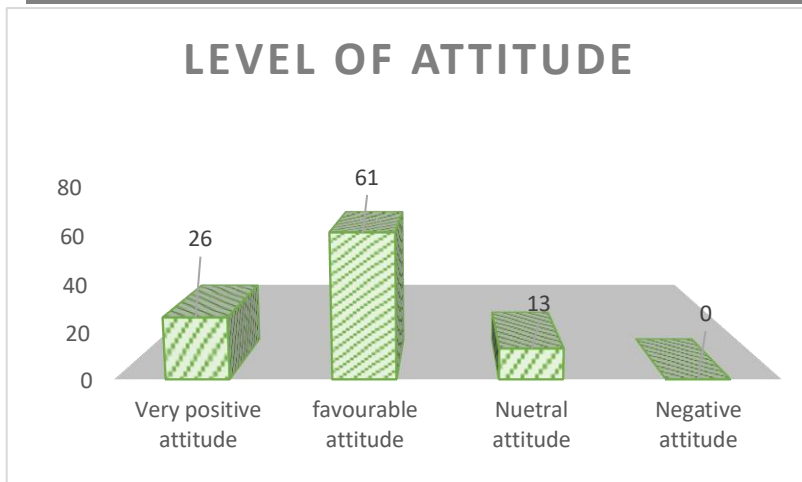
| | | Others | | |
|----|--------------------------------------|----------------------|----|-----|
| 05 | Monthly income | Up to 10000 | 43 | 43% |
| | | 10001-25000 | 26 | 26% |
| | | 25001-50000 | 14 | 14% |
| | | 50001 Above | 17 | 17% |
| 06 | Type of family | Joint | 16 | 16% |
| | | Nuclear | 81 | 81% |
| | | Extended | 3 | 3% |
| 07 | Type of residency | Rural | 53 | 53% |
| | | Urban | 46 | 46% |
| | | Slum | 1 | 1% |
| 08 | Previous knowledge on organ donation | Yes | 89 | 89% |
| | | No | 11 | 11% |
| 09 | If YES, Source of information | Mass Media | 68 | 68% |
| | | Health Professionals | 18 | 18% |
| | | Peer Group | 2 | 2% |
| | | Others | 12 | 12% |

The study shows that 28% had excellent knowledges, 31% had very good knowledge, 26% had good knowledge, 14% had average knowledge and 1% had poor knowledge.

Table 2: Knowledge level of undergraduate nursing students

| LEVEL OF KNOWLEDGE | FREQUENCY |
|---------------------|-----------|
| poor knowledge | 1 |
| Average knowledge | 14 |
| Good knowledge | 26 |
| Very good knowledge | 31 |
| Excellent knowledge | 28 |

The study reveals that 26% had Very positive attitude, 61% had Favourable attitude, 13% had Neutral attitude and 0% had Negative attitude.



As reflected in the figure, the majority of subjects (26%) had a very positive attitude, 61% had a favorable attitude, 13% had a neutral attitude, and none had a negative attitude.

There was a significant association between the level of knowledge and selected demographic variables such as monthly family income and previous knowledge of organ donation. However, there was no significant association between attitude and selected demographic variables such as age, gender, year of study, monthly family income, type of family, type of residence, previous knowledge of organ donation, and source of information.

DISCUSSION

A similar study conducted in 2022 assessed the knowledge, attitude, and associated factors related to organ donation among undergraduate health science students in India. A convenience sampling method was used to select 199 study participants. The results showed that 84% of nursing students had adequate knowledge, followed by 76% of medical students and 56% of paramedical students. Nursing students demonstrated a more favorable attitude towards organ donation compared to students from other disciplines. A lack of awareness about organ donation was reported by all participants, and they expressed a desire for the topic to be included in the academic curriculum.¹

RECOMMENDATIONS

1. A similar study can be replicated with a larger sample size and in different settings.
2. A study can be conducted using an experimental design.
3. A follow-up study can be conducted to assess the effectiveness of a structured teaching program on organ donation.

CONCLUSION

The present study assessed the knowledge and attitude of undergraduate nursing students towards organ donation using a descriptive research design and a non-probability convenience sampling technique, with a sample size of 100. The findings indicate that while the majority of students demonstrated good to excellent knowledge (85%), a small proportion still had average or poor knowledge (15%), highlighting the need for targeted educational interventions. Attitudinal responses were largely positive, with 87% of students exhibiting a favorable or very positive attitude towards organ donation. These findings underscore the importance of integrating organ donation awareness and education into the nursing curriculum to further enhance both knowledge and positive attitudes among future healthcare professionals. Promoting awareness at the academic level can contribute significantly to improving organ donation rates in the long term.

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