



## The future of organ donation lies in education: A study among B. Sc Nursing students

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### Abstract

**Background:** organ donation is a life-saving medical process where healthy organs are transplanted from donors to recipients whose organs have failed due to disease or injury. This study was conducted to assess the knowledge and attitude of B.Sc Nursing students toward organ donation. Findings reveal a significant knowledge gap and a moderate attitude level among students. The results emphasize the urgent need for awareness and education programs to improve willingness for both live and deceased organ donation among future healthcare professionals.

**Objectives:** The study aimed to assess the knowledge and attitude of B.Sc Nursing students towards organ donation and to identify the relationship between these variables and selected demographic factors.

**Methods:** A descriptive study was conducted using structured questionnaires and an attitude scale among 100 B.Sc Nursing students selected through convenient sampling. Data analysis showed that 34% had adequate knowledge, 64% satisfactory, and 21% inadequate knowledge. Regarding attitude, only 1% showed a very favourable attitude, while the majority (60%) had a satisfactory attitude. A positive correlation ( $r = 1.75$ ) was found between knowledge and attitude, indicating that increased knowledge may influence positive attitudes toward organ donation.

**Keywords:** Organ donation, knowledge, attitude, awareness

### Introduction

According to Mark Twin Organ Donation, it is the process of surgically removing an organ or tissue from one person (the organ donor) and placing it into another person (the recipient). Transplantation is necessary because the recipient's organ has failed or has been changed by disease or injury.

Every day, people of all ages and backgrounds become recipients and donors of organs and tissues. The lives are saved and improved by the gift of life, sight and health with 1 per million donation or 2200 eyes, 2200 kidneys, 1100 livers, 1100 pancreas and 1000 hearts. This should take care of almost all current demands for organs.

In 1959, the kidney was the first human organ to be transplanted successfully, liver, heart and pancreas transplants were successfully performed by the late 1960.

There are two types of organ donation living donation and deceased donation. Living organ donation is when someone donates a portion of their liver or their kidney to a patient while the donor is still alive. Deceased organ donation is an organ or part of an organ can be given at the time of the donor's death. Most transplants are done through deceased donation.

### Background of The Study

Worldwide, the kidneys are the most commonly transplanted organs followed by liver and then the heart, cornea and musculoskeletal grafts. In US the most commonly transplanted organs are kidney, liver, heart, lungs, pancreas and intestines. The cost of kidney transplant is \$ 400,000 in U.S.

In India, private hospitals charge anything between Rs. 10 Lakh-30 Lakh for heart transplant while kidney transplant the cost is from 5-20 lakh the ministry of health's calculation says that the annual requirement for kidneys could range between 2-3 lakh with a mere 6000 transplants occurring in reality.

In 2014, Tamilnadu organ donation was 136 donors. India has the lowest rate of organ donation in the world with 0.5 donor per million population which is farless compared to over 30 donors per million in some western countries. Government of Andhra Pradesh initiated the deceased donor program under the banner of "Jeevan Daan" since January 2018, and has been facilitating and taking care organ distribution.

To help the patients with organ failure get a renewed lease of life, MOHAN Foundation (Multi organ Harvesting Aid Network) was started by Dr. Sunil Shroff in the year 1997 in Chennai on April 7th 2007, the Hyderabad office was launched and it has grown by leaps and bounds in the last ten years with Mrs. Lalitha Raghuram at the helm.

### Need For The Study

In 2016 approximately 82% of the organ transplanted in the united states were from deceased donors 271630 organs are transplanted from 9,971 deceased individuals while an additional 5,980 organs were transplanted from living donors

The number of living organ donors is on the decline, according to a new study. The result show that overall, living kidney, liver and lung donation has decreased over the last five years, going from about 7,000 in 2004 to 6,219 in 2008.

In addition, organs from deceased donors went down for the first time in 2008 until them, the number of deceased donors has always increased compared to the previous year This decline has resulted in a wide ring gap between the number of patients who are awaiting a donor organ" said the study author Andrew S. Klein, M.D director of cedars, sinai medical centers comprehensive transplant center. The study looked at trends in organ donation between 1999 and 2008.

A survey developed by physicians and research at Emory university in united states about organ donation and transplantation found that misperceptions about the life

saving process are most common deterrents for donating organs.

In 2019 Faran Khalid and Abdullah Bin Khalid did a research on organ donation in general population of Karachi. The study results indicate that there was inadequate knowledge among the general population.

In 2018 GokulSarvewaran and Manikunda Nesan did a research on organ donation in B.Sc Nursing students of South India, Puducherry study results shows that there was inadequate knowledge among B. Sc Nursing students

In 2017 Dr. G.S. Adithyan conducted research on organ donation among medical students in Kerala. Results shows that the majority of the students had adequate knowledge regarding organ donation. But it is not translated into their willingness for donation both cadaveric and live. The study reiterates the need for educational interventions for medical students which cut across various disciplines to make them understand the nuances of the issues in a holistic way.

In the current study even though less students showed strong willingness to donate after death, the majority told about thinking in the future and were in the undecided category.

It is clearly evident that imparting knowledge and awareness to various group of students and trainers and other category of peoples who can then be motivated to donate their organs with this mind we have taken up this study to assess the knowledge and attitude of B. Sc Nursing students regarding organ donation.

### Statement of The Problem

"A descriptive study to assess the knowledge and attitude regarding organ donation among B. Sc Nursing students of a selected College in Vijayawada."

### The objectives of the present study are

1. To assess the knowledge and attitude of B. Sc Nursing students regarding organ donation.
2. To establish the relationship between the knowledge the attitude of B. Sc Nursing students towards organ donation.
3. To establish the relationship between the knowledge and attitude of B. Sc Nursing students towards organ donation with their selected demographic variables.

### Hypothesis

Hypothesis of the present study are:

**H1:** There will be significant relationship between the knowledge and attitude of B. Sc Nursing students toward organ donation.

**H2:** There will be a significant association between the knowledge and attitude of B. Sc Nursing students towards organ donation and selected demographic variables.

### Population

The population of the present study comprises of B. Sc Nursing students in selected College of Nursing, Vijayawada.

### Sample and Sampling Technique

The sample for the present study consists of B. Sc nursing students in selected College of Nursing, Vijayawada.

### Sample Size

Sample size may depend upon the nature of the population, number of subgroups, nature of study, type of sampling, level of accuracy and availability of time and money.

In this study a sample of 100 nursing students are selected.

### Development of Thetools

Based on the conceptual framework and objectives of the study the following tools are developed to generate the data.

- Steps adopted for preparation of the tools and the selection of items includes:
- Review of research and non-research literature related to organ donation.
- Consultation with experts.
- Peer group discussion.

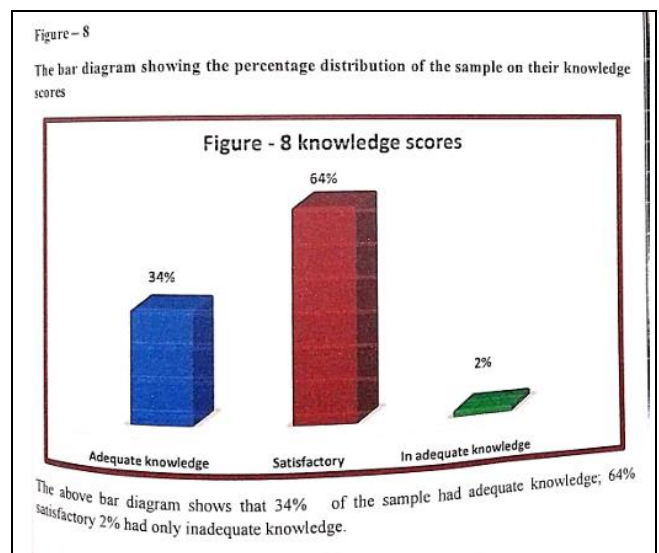
**Demographic data questionnaire:** This is aimed at gathering the information regarding the demographic variables of the sample nursing students.

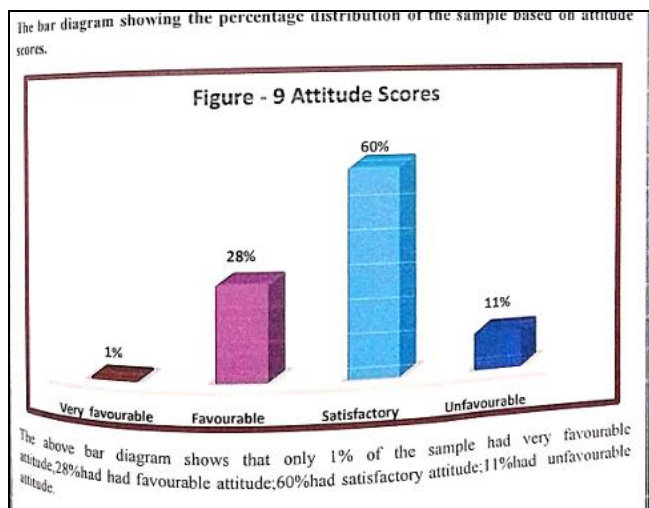
**Structured knowledge questionnaire:** To determine the level of knowledge of the nursing students regarding organ donation and its importance.

**Attitude scale:** To assess the attitude of the nursing students towards organ donation and its importance.

The plan for data analysis is as follow

- Description of sample characteristics by using frequency and percentage distribution.
- Computing the mean and standard deviation of the knowledge scores of the H. Se Nursing students concerning organ donation.
- Computing the mean and standard deviation of the attitude scores of It. Se Nursing students concerning organ donation.
- Co-efficient correlation is used to explain the relationship between knowledge and attitude of B. Sc Nursing Students concerning organ donation.
- Calculation of Chi-square value to find out the association of the knowledge and attitude of the B. Sc Nursing students regarding organ donation with their selected demographic variables.





KNOWLEDGE		ATTITUDE	
MEAN	STANDARD DEVIATION	MEAN	STANDARD DEVIATION
19.05	3.95	89.25	11.9

### Implications

The findings of the study have several implications for nursing education, nursing practice and nursing research general education and nursing administration

### Nursing Practice

The expanded role of professional nurses emphasize those activities which are promoting the health and knowledge of the individual. The knowledge deficit of nursing students regarding proper organ donation indicates the need for organizing an educational programme for them regarding proper organ donation. Adequate knowledge and practices combined can influence their nursing practice should be developed systematically and significantly.

### Nursing Education

Every profession has to satisfy the demand of quality assurance nursing has no exception to its only through standard education can their be a standard practice nursing education should include community program which aim at improving of nursing students for promoting health including awareness of proper organ donation.

### Nursing Administration

Nursing administration should provide necessary facilities and opportunities for nursing staff to equip themselves with the knowledge regarding proper organ donation Nursing administration should be provided with sufficient financial support and motivation for conducting health education program regarding proper organ donation in various setting for.

### Nursing Research

Existing research should be voved and analyzed with special reference to the knowledge regarding proper hon donation and attitude towards it among nursing students. Health personal should take initiative to conduct their Type of research in field of nursing.

### Discussion

Discussion of the study is based on the findings obtained from statistical analysis of the data and according to the objectives.

- To assess the knowledge level of B.Sc nursing students regarding organ donation. The data showed that 34% of sample had adequate knowledge; 64% had satisfactory; 21% had inadequate knowledge.
- To determine the attitude of B.Sc nursing students regarding organ donation. The analysis showed that only 1% of the sample had very favourable attitude; 28% had favourable attitude; 60% had satisfactory; 11% had unfavourable attitude.
- To establish relationship between the knowledge and attitude towards organ donation among BSc nursing students. The analysis revealed that coefficient correlation between the knowledge and attitude score is 75; indicating a positive correlation between the knowledge and attitude.
- To identify the relationship between the knowledge and attitude regarding organ donation with selected demographic variables. The analysis revealed that there is a

### Recommendations

The following studies can be made based on present study

- An experimental study can be conducted to find out the effectiveness of structured teaching programme on attitude and practice of nursing students regarding proper organ donation.
- A study can be carried out to find out the knowledge practice and attitude of parents and teachers towards proper organ donation.
- The study can be replicated on a large sample of nursing students selected from different schools and colleges for wider generalization.

### Conclusion

The study has brought out clearly the need to enhance the knowledge of B.Sc nursing students regarding organ donation. The demographic variable do influence their knowledge and attitude a comprehensive approach is needed to improve the knowledge and modify attitude among BSc nursing students and help others.

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