



# A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING ORGAN DONATION AMONG B.SC NURSING 1<sup>ST</sup> SEMESTER STUDENT IN MARATHWADA REGION

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**Abstract:** Organ donation, a noble act of giving life to those in desperate need, has been a profound aspect of healthcare that transcends cultural and geographical boundaries. The primary objectives 1) To assess the knowledge regarding organ donation among B.Sc Nursing 1st semester student in Marathwada Region..Secondary objectives 1)To assess the knowledge regarding organ donation among B.Sc Nursing 1st semester student in Marathwada Region.2)To find out the association between organ donation among B.Sc Nursing 1st semester student and demographic variables.Methodology: Quantitative research approach is used in this study. The research design used in this study was Non-experimental descriptive research design, Results: Mean knowledge score was  $11.45 \pm 3.12$  and mean percentage of knowledge score was  $57.25 \pm 15.64$ . The tabulated 'F' values was 2.78(df=3,36) which is less than the calculated 'F' i.e. 6.84 at 5% level of significance. Also the calculated 'p'=0.001 which was less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that age in years of first semester B.Sc. nursing students is statistically associated with their knowledge score. The present study showed that, majority of samples i.e. 40% of B.Sc. nursing 1<sup>st</sup> semester student had average level of knowledge score, 15% of B.Sc. nursing 1<sup>st</sup> semester student had good level of knowledge, 22% of B.Sc. nursing 1<sup>st</sup> semester student had very good level of knowledge score, 3% of B.Sc. nursing 1<sup>st</sup> semester student had poor level of knowledge score, and 0 %. Minimum knowledge score was 6 and maximum knowledge score was 20. Mean knowledge score was  $11.45 \pm 3.12$  and mean percentage of knowledge score was  $57.25 \pm 15.64$ .

**Index Terms** – Assess, Knowledge, Organ Donation, B.Sc. Nursing

## I. Introduction

Organ donation, a noble act of giving life to those in desperate need, has been a profound aspect of healthcare that transcends cultural and geographical boundaries <sup>[1]</sup>. It is through this philosophical underpinning that the seeds of organ donation were sowed, fostering a culture of compassion and selfless giving <sup>[2]</sup>. The practice of organ donation in India also finds resonance in historical accounts and mythological stories<sup>[3]</sup> In the contemporary era, India faced unique challenges regarding organ donation and transplantation. The advent of modern medical science brought with it advanced surgical techniques and treatments, including organ transplantation<sup>[4]</sup>.

### A. Background

The organ transplantation saves the life of individuals whose life is in danger due to organ/tissue failure. The presence of negative and positive attitudes toward tissue and organ donation is a determinant factor in the donation of tissue and organ <sup>[5]</sup>.

### B. Need of the study

Many people need an organ transplant due to a genetic condition such as polycystic kidney disease, cystic fibrosis, or a heart defect. Infections such as hepatitis, physical injuries to organs, and damage due to chronic

### C. Title of the study

A Descriptive study to assess the knowledge regarding organ donation among B.Sc. Nursing 1<sup>st</sup> semester student in Marathwada

### D. Objectives of the study

#### The primary objectives

- To assess the knowledge regarding organ donation among B.Sc Nursing 1<sup>st</sup> semester student in Marathwada Region

#### SECONDARY OBJECTIVES

- To assess the knowledge regarding organ donation among B. Sc Nursing 1<sup>st</sup> semester student in Marathwada Region.
- To find out the association between organ donation among B. Sc Nursing 1<sup>st</sup> semester student and demographic variables.

### E. Operational definitions

**Assess** –Refers to statistical measures of knowledge regarding organ donation among B.Sc. Nursing 1<sup>st</sup> Semester student. conditions such as diabetes may also cause a person to require a transplant. Surgeons performed more than 36,000 organ transplants in 2018, but many more people need organs. In January 2019, more than 113,000 people in the United States were on organ transplant waiting lists Region.

1. *Knowledge*: In this study, it refers to the correct responses obtained from B.Sc..Nursing First semester students regarding organ donation.
2. *Organ donation*- Organ donation 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 damaged by disease or injury.
3. *B.Sc..Nursing*: In this study, B.Sc. nursing full form is Bachelor of Science in Nursing, a undergraduate degree programme. B.Sc. Nursing or Bachelor of Science in Nursing is a four-year undergraduate course in the field of medical science.
4. *Marathwada Region*: In this study, it refers to a selected region of Maharashtra.

## F. Delimitation

1.Student who are not willing to participate in research study. 2. Subjects were informed that can withdraw from the study at any time if they want.

## G. Ethical Aspects

The study proposal was accepted by the college committee of the institution. Permission was obtained by the concerned authorities before conducting the study. Consent letter was obtained by individual samples after explaining them the research process in their own language. Confidentiality regarding the participants information was maintained by using code number by the investigator.

## H. Review of literature

In the present study the literature reviewed has been organized into the following categories:

## I. Conceptual Framework

The conceptual framework selected for the study was based on Rosenstok's and Becker's health belief models

## II.

- 1) *Sampling technique*: Non probability convenient sampling technique.

### G. Sampling criteria

#### 1) *Inclusive criteria*:

- Students who are present at time of data collection.
- Students who are willing to participate in the study.
- Students who can read and write English.
- Only 1<sup>st</sup> semester B.Sc. nursing students (Fresher)

## 2) *Exclusive criteria:*

In this study, exclusive criteria was, Bsc nursing student who are

- Student who are not willing to participate in research study.
- Subjects were informed that can withdraw from the study at any time if they want.
- The study was not interventional study only to assess the knowledge regarding awareness of organ donation in BS.c. Nursing first semester student.
- The study was conducted only on B.Sc. Nursing first semester student. ▪ Only specific nursing colleges were selected for the study.

## H. *Description of Tools*

- 1) *Section A:* Demographic variables
- 2) *Section B:* Self-structured knowledge questionnaire based on organ donation

## I. *Validity*

To ensure the content and construct validity, the tool was distributed to 11 experts including medical surgical nursing, child health nursing. OBGY, community health nursing. 11 tools were received after validation from the experts.

## J. *Reliability*

In this study, Karl pearson correlation coefficient formula was used for reliability. The correlation coefficient 'r' of the questionnaire was  $r = 0.8439$ , which is more than 0.8. hence the questionnaire was found to be reliable.

## K. *Pilot study*

A sample of 06 B.Sc. nursing 1<sup>st</sup> semester student was selected from the selected college of the Marathwada Region. The investigator approached the sample individually, discussed the objective of the study and obtained consent for participation in study. The data was represented in the form of tables and graph. The data regarding knowledge of B.Sc nursing 1<sup>st</sup> semester student. It was found to be significant at 0.05 level of significance.

## L. *Data collection*

Main study was done on 06/10/2023.

Permission was obtained from the concerned authorities.

Before giving questionnaire self-introduction was done by the investigator and the purpose of the study was explained.

Consent of the samples was taken

Test was conducted by self-administered questionnaire.

Questionnaire were distributed to the samples and collected back after 40 minute.

### III. Result

*Section I:* Distribution of first semester B.Sc. nursing students with regards to demographic variables.

Table 1: Percentage wise distribution of First Semester B.Sc. Nursing Students according to their demographic characteristics.

n=40

Demographic Variables	No. of nursing students	Percentage(%)
<b>Age(yrs)</b>		
18 years	17	42.5
19 years	10	25.0
20 years	8	20.0
21 years and above	5	12.5
<b>Gender</b>		
Male	10	25.0
Female	29	72.5
Transgender	1	2.5
<b>Religion</b>		
Hindu	31	77.5
Muslim	2	5.0
Buddhist	7	17.5
Others	0	0
<b>Area of Residence</b>		
Urban	23	57.5

Rural	17	42.5
<b>Monthly family income(RS)</b>		
Rs 10000 and below	15	37.5
Rs 10001-15000	6	15.0
Rs 15001-20000	10	25.0
Rs 20001 and above	9	22.5
<b>Previous knowledge regarding organ donation</b>		
Yes	24	60.0
No	16	40.0
<b>Source of information about organ donation</b>		
Health Professionals	8	20.0
Newspaper	7	17.5
Social Group	12	30.0
TV/Radio	13	32.5

*Section II:* Assessment of level of knowledge regarding Organ Donation among first semester B.Sc.

nursing students from selected nursing college of Marathwada Region. Table 2: Assessment with level of knowledge score

n=40

Level of knowledge	Score Range	Level of Knowledge Score	
		No of nursing students	Percentage
Poor	0-5(0-25%)	0	0
Average	6-10(26-50%)	15	37.5
Good	11-15(51-75%)	22	55
Very Good	16-20(76-100%)	3	7.5
Minimum score		6	
Maximum score		20	
Mean knowledge score		11.45 ± 3.12	
Mean % Knowledge Score		57.25 ± 15.64	

*Section II:* association of level of knowledge score regarding organ donation among first semester b.sc. nursing students from selected nursing college of marathwada region in relation to demographic variables

Table 3: Association of knowledge score regarding Organ Donation among nursing students in relation to age in years.

n=40

Age in years	No. of nursing students	Mean knowledge score	F-value	p-value
18 years	17	9.35±1.57	6.84	0.001 S,p<0.05
19 years	10	12.40±4.40		
20 years	8	13.12±1.72		
21 years and above	5	14±1.41		

Table 4: Association of knowledge score regarding Organ Donation among nursing students in relation to gender.

n=40

Gender	No. of nursing students	Mean knowledge score	F-value	p-value
Male	10	12.10±3.78	0.43	0.64 NS,p>0.05
Female	29	11.17±2.95		
Transgender	1	13±0		

n=40

Table 5: Association of knowledge score regarding Organ Donation among nursing students in relation to Religion.

Religion	No. of nursing students	Mean knowledge score	F-value	p-value
Hindu	31	11.19±3.11	0.68	0.51 NS,p>0.05
Muslim	2	11±5.65		
Buddhist	7	12.71±2.75		
Others	0	0±0		

Table 6: Association of knowledge score regarding Organ Donation among nursing students in relation to Residence.

n=40

Residence	No. of nursing students	Mean knowledge score	t-value	p-value
Urban	23	12.08±3.36	1.52	0.13 NS,p>0.05
Rural	17	10.58±2.62		

Table 7: Association of knowledge score regarding Organ Donation among nursing students in relation to Monthly

Family Income(Rs).



n=40

Monthly family income(Rs)	No. of nursing students	Mean knowledge score	F-value	p-value
Rs 10000 and below	15	8.66±1.71	14.56	0.0001 S,p<0.05
Rs 10001-15000	6	12.50±2.94		
Rs 15001-20000	10	14.30±2.90		
Rs 20001 and above	9	12.22±1.20		

Table 8: Association of knowledge score regarding Organ Donation among nursing students in relation to previous

Source of knowledge	No. of nursing students	Mean knowledge score	F-value	p-value
Health Professionals	8	10.50±3.07	0.49	0.68 NS,p>0.05
Newspaper	7	12.28±3.63		
Social Group	12	11.16±2.88		
TV/Radio	13	11.84±3.28		

knowledge regarding organ donation

n=40

Previous knowledge	No. of nursing students	Mean knowledge score	t-value	p-value
Yes	24	12.29±2.99	2.18	0.035 S,p<0.05
No	16	10.18±2.97		

Table 9: Association of knowledge score regarding Organ Donation among nursing students in relation to source of knowledge regarding organ donation

n=40

#### IV. Discussion

The present study showed that, majority of samples i.e. 40% of B.Sc. nursing 1<sup>st</sup> semester student had average level of knowledge score, 15% of B.Sc. nursing 1<sup>st</sup> semester student had good level of knowledge, 22% of B.Sc. nursing 1<sup>st</sup> semester student had very good level of knowledge score, 3% of B.Sc. nursing 1<sup>st</sup> semester student had poor level of knowledge score, and 0%. Minimum knowledge score was 6 and maximum knowledge score was 20. Mean knowledge score was  $11.45 \pm 3.12$  and mean percentage of knowledge score was  $57.25 \pm 15.64$ .

#### V. Conclusion

The study reveals that, mean knowledge score was  $11.45 \pm 3.12$  and mean percentage knowledge score was  $57.25 \pm 15.64$ . Analysis also reveals that there is association of knowledge score with age, educational status, occupation, knowledge regarding organ donation, while none of other demographic variables were associated with knowledge score regarding organ donation.

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