



# “A STUDY TO ASSESS LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING ORGAN DONATION AMONG B.Sc. NURSING STUDENTS AT DAYANANDA SAGAR UNIVERSITY, BENGALURU.”

<sup>1</sup>Mr. Akash Manganure, <sup>2</sup>Mr Ramesh S, <sup>3</sup> Mr. Sangamesh Kamshette, <sup>4</sup> Ms. Jagadevi Melinamani, <sup>5</sup> Mr. Tufail Ahmad  
Dar

<sup>2</sup>Professor

<sup>2</sup>Department of Medical Surgical Nursing Department,

<sup>2</sup>College of Nursing Sciences, Dayananda Sagar University, Bangalore

**Abstract:** A study was conducted by using the descriptive designs with 80 B.Sc. nursing students were selected by probability convenience sampling technique. They were assessed for the level of knowledge regarding organ donation by structured questionnaire and level of attitude regarding donation by 5 point likert scale. In majority of students 56.3% (45) are having moderate level of knowledge, 28.7% (23) were having adequate level of knowledge and 15 % (12) were having inadequate level of knowledge regarding organ donation. And also majority 86.25% (69) were having moderate favourable level of attitude about organ donation, 12.5% (10) were having favourable level of attitude and 1.25% (1) was having unfavourable level of attitude towards organ donation.

## Background

Organ donation is the process of giving an organ or a part of organ for the purpose of transplantation into another person. In order for a person to become an organ donor, blood and oxygen must flow through the organs until the time of recovery to ensure viability. India is one of the lowest organ donating countries in the world. Statistics Show that less than one in a million in India donate their organs. People die each day waiting for an organ transplant. Every donor can save 8 lives by also donating tissues and eyes the same donor can save up to 50 lives, yet there are no effective studies has not done on this topic.

## Statement of the problem

A study to assess level of knowledge and attitude regarding organ donation among Bsc. Nursing students at Dayananda Sagar university, Bengaluru

## Methods

A descriptive research approach with descriptive research design was adopted in this study to assess the level of knowledge and attitude regarding organ donation among Bsc. Nursing students. Convenience sampling was used to select the sample for the study. Data collected from the sample were analyzed by descriptive and inferential statistics. The sample size was 80.

## Significant findings of the study

- Majority of students 56.3% (45) are having moderate level of knowledge, 28.7% (23) were having adequate level of knowledge and 15 % (12) were having inadequate level of knowledge regarding organ donation.
- Majority 86.25% (69) were having moderate favourable level of attitude about organ donation, 12.5% (10) were having favourable level of attitude and 1.25% (1) was having unfavourable level of attitude towards organ donation.

## Conclusion

The study finding shows that there was moderate level of knowledge and with moderate favourable level of attitude among B.Sc. Nursing Students. There were statistical significance association between knowledge score and selected demographic variables.

## Key words

Knowledge, Attitude, organ donation

## INTRODUCTION

Organ donation is the process of giving an organ or a part of organ for the purpose of transplantation into another person. In order for a person to become an organ donor, blood and oxygen must flow through the organs until the time of recovery to ensure viability. This requires that a person die under circumstances that have resulted in an irreparable neurological injury, usually from massive trauma to the brain such as aneurysm, stroke or automobile accident. Only after all efforts to save the patient's life have been exhausted, tests are performed to confirm the absence of brain or brain stem activity, and brain death has been declared, is donation a possibility.

Organ Donation in India 1994, the Government of India passed the Transplantation of Human Organs Act that legalized the concept of brain death and, for the first time, facilitated organ procurement from heart beating, brain dead donors. However, this concept has not caught on well in India for want of public education and awareness. Times of India (TOI) reported that In India every year nearly

- 501200,000 people die because of non-availability of organs.
- 200,000 people die of liver disease.
- 50,000 people die from heart disease.
- 150,000 people await a kidney transplant but only 5,000 get one.

1700,000 lakh people suffer from corneal blindness and await transplant. India is one of the lowest organ donating countries in the world. Statistics Show that less than one in a million in India donate their organs. People die each day waiting for an organ transplant. Every donor can save 8 lives by also donating tissues and eyes the same donor can save up to 50 lives, yet there are no effective studies has not done on this topic.

### Objectives of the study were

1. To assess the level of knowledge regarding organ donation among B.Sc. nursing students.
2. To assess the level of attitude regarding organ donation among B.Sc. nursing students.
3. To determine the association between level of knowledge and attitude among B.Sc. nursing students regarding organ donation and demographic variables.

## METHODOLOGY

### RESEARCH APPROACH

A Descriptive Research approach was selected for the study

### RESEARCH DESIGN

Research design adopted for the present study was Descriptive Research Design.

### VARIABLES:

#### DEPENDENT VARIABLE:

In this study the dependent variables are knowledge and attitude regarding organ donation.

#### DEMOGRAPHIC VARIABLE:

**Demographic variables** are age of the student, gender, religion, year of study, source of information.

## RESEARCH SETTING

The study was conducted at college of Nursing sciences, Dayananda Sagar University, Bengaluru.

### POPULATION

In this study, the target population of the study was comprised of B.Sc. Nursing students at Dayananda Sagar University, Bengaluru.

### SAMPLE

The sample for the study was consisting of first and second year B.Sc. nursing students.

### SAMPLE SIZE

The sample of the study was comprised of 80 nursing students at Dayananda Sagar University Bengaluru.

## SAMPLING TECHNIQUE

Probability: convenience sampling technique was used in this study.

## SAMPLING CRITERIA

### INCLUSION CRITERIA

1. Students who are studying in the first and second year B.Sc. nursing at Dayananda Sagar University, Bengaluru.
2. Students who are willing to participate in this study.

### EXCLUSION CRITERIA

1. Students who have not undergone previous organ donation awareness program and seminar.

## DATA COLLECTION INSTRUMENT

Demographic proforma and structured knowledge questionnaire were used to collect data .

## DEVELOPMENT OF THE TOOL

Written formal permission was obtained from the authorities of the institutions. The written consent was obtained from the participants prior to the study. The data was collected by using self-administered knowledge questionnaire to assess the knowledge and 5 point Likert scale to assess the attitude.

## PREPARATION OF BLUEPRINT

A blueprint was prepared with objectives keeping in mind. It depicted the distribution of items according to knowledge, attitude, comprehension and applications. The domains were demographic variables, structured knowledge questionnaire on organ donation and attitude scale on organ donation.

## PLAN FOR DATA ANALYSIS

- Demographic profile containing sample characteristics would be analyzed using frequency and percentage
- Knowledge and attitude score would be analyzed by computing frequency, percentage, mean, median, mean percentage and standard deviation
- Chi-square test would be used for finding association between the knowledge score and attitude score with sociodemographic variables

## RESULTS

### SECTION I: Demographic Data-Distribution of sample according to demographic variable.

**Table 1.1: Frequency and percentage distribution of sample according to age, gender, year of study and religion.**  
n=80

Sl.no	Demographic variable	Frequency	Percentage
1	Age		
	a. 18 -19	43	53.75%
	b. 20 -22	36	45%
	c. >23	1	1.25%
2	Gender		
	a. Male	37	46.25%
	b. Female	43	53.75%
	c. Other	0	0

3	Year of study		
	a. 1 <sup>st</sup> year	51	63.75%
	b. 2 <sup>nd</sup> year	29	36.25%
4	Religion		
	a. Hindu	53	66.25%
	b. Muslim	13	16.25%
	c. Christian	11	13.75%
	d. Any other	3	3.75%
5	Do you know about organ donation		
	a. Yes	73	91.25%
	a. No	7	8.75%
	<b>IF YES, SOURCE OF INFORMATION</b>		
	a. Newspaper and mass media		
	b. Seminar		
	c. Peer groups		
	d. Others		
6	Do you have organ donor card		
	a. Yes	1	1.25%
	b. No	79	98.75%

## Section II: Assessment of level of knowledge and attitude regarding organ donation among B.Sc. Nursing students.

Mean, Standard deviation and Mean percentage of samples.

n=80

Sl.no	Aspects	No of items	Max score	Knowledge		
				Mean	SD	Mean%
1	Level of knowledge	20	20	12.975	1.00654	16.218%
2	Level of attitude	10	50	33.475	4.52485	41.843%

**Section III: Interpretation of level of knowledge with selected demographic variable.****Distribution of knowledge according to demographic variable**

n=80

Interpretation	Level of knowledge	Frequency	Percentage
≤ 49%	Inadequate knowledge	12	15%
50-74%	Moderate knowledge	45	56.3%
≥ 75%	Adequate knowledge	23	28.7%

**Section IV: Interpretation of level of attitude with selected demographic variable.****Distribution of level of attitude according to demographic variable.**

n=80

Interpretation	Level of attitude	Frequency	Percentage
≤ 49%	Unfavourable attitude	1	1.25%
50-74%	Moderate favourable	69	86.25%
≥ 75%	Favourable	10	12.5%

**Section 5: Association between level of knowledge and the selected demographic variable.****Association between level of knowledge and the selected demographic variable.**

Sl.no	Demographic variable	Degree of freedom	Table value (P)	Calculated value (X2)	inference
1	Age	4	9.49	5.0659	NS*
2	Gender	4	9.49	4.4516	NS*
3	Year of study	2	5.99	1.1273	NS*
4	Religion	6	12.59	10.75	NS*

5	Knowledge about organ donation	2	5.99	11.0140*	S*
6	Organ donor card	2	5.99	2.5093	NS*

Significant at P&lt;0.05 level

S\* - significant

NS\*

-

non-significant

## Section 6: Association between level of attitude and the selected demographic variable.

### Association between level of attitude and demographic variable.

n=80

Sl.no	Demographic variable	Degree of freedom	Table value (P)	Calculated value (X2)	inference
1	Age	4	9.49	2.2497	NS*
2	Gender	4	9.49	0.9172	NS*
3	Year of study	2	5.99	0.6292	NS*
4	Religion	6	12.59	6.9627	NS*
5	Knowledge about organ donation	2	5.99	3.1287	NS*
6	Organ donor card	2	5.99	0.17697	NS*

Significant at P&lt;0.05 level

S\* - Significant

NS\*

-

non-significant

## DISCUSSION

### SECTION I: DEMOGRAPHIC DATA

53.75% of participants belongs to age group of 18-19 years, 45% are to the 20-22 years and 1.25% are belongs to the above 23 years of age group. 53.75% of participants belongs to female gender, 46.25% are to the male gender and 0% are belongs to the others group. 63.75% of participants belongs to 1<sup>st</sup> year B.Sc. and 36.25% are to the 2<sup>nd</sup> year B.Sc. nursing. 63.25% of participants belongs to Hindu religion, 16.25% are to the Muslim religion, 13.75% are belongs to the Christian and 3.75% are belongs to others religion. 91.25% of participants know about organ donation and 8.75% are does not know about organ donation. 78.75% of participants don't have the organ donor card and 1.25% is having organ donor card

### SECTION II: Assessment of level of knowledge and attitude regarding organ donation among B.Sc. Nursing students.

The level of knowledge mean was 12.975, standard deviation 1.00654 and mean percentage was 16.218%. The level of a attitude mean was 33.475, standard deviation 4.52485 and mean percentage was 41.843%.

### SECTION III: Interpretation of level of knowledge with selected demographic variable.

45(56.3%) students have moderate knowledge, 23 (28.7%) students are adequate knowledge and 12 (15%) are having inadequate knowledge.

### SECTION IV: Interpretation of level of attitude with selected demographic variable.

69 (86.25%) students have moderate favourable attitude, 10 (12.5%) students have favourable attitude and 1 (1.25%) is having unfavourable attitude.

**SECTION V: Association between level of knowledge and the selected demographic variable.**

The findings of the study had shown that no significant association between level of knowledge with their selected demographic variables such as age, gender, year of study, religion and organ donor card and there is a significance with knowledge about organ donation.

**SECTION VI: Association between level of attitude and the selected demographic variable.**

The findings of the study had shown that no significant association between level of attitude with their selected demographic variables such as age, gender, year of study, religion, knowledge about organ donation and organ donor card.

**NURSING IMPLICATIONS**

- Health education is one of the cost-effective interventions, so nurse should take initiative for arranging health talks, seminar, educative counselling.
- Awareness programme to all the colleges so that they can motivate the youngster to understand the importance of organ donation to donate the organ
- The holistic health care approach should be emphasized during the training period and awareness should be given about the importance of educating the public regarding the organ donation. The nursing personal should be given In-service education to update their knowledge.
- Nursing curriculum should prepare the prospective nursing student to assist the community and youngster in giving information about organ donation.
- The nurse administrator should organise In-service education programme for the nurse to update their knowledge on Organ donation.

**RECOMMENDATIONS**

- A similar study can be conducted in a large scale.
- A similar study can be conducted to assess the effectiveness of organ donation among B.Sc. nursing students.

**REFERENCES**

1. Afzal Aghaee, Awareness of religious leader's fatwa and willingness to donate organ, International Journal of Organ Transplantation Medicine, November 2015. Vol-6(4),158-164.
2. Broeckx N, Verhoeven D, Transplanting disease from organ donor in western europ: Fault liability or strict liability, European Journal of Health Law, June (2015). Vol-22(3), 207-238.
3. Chamsi-Pasha. H, Kidney Transplantation: Ethical challenges in the Arab world. Saudi Journal of Kidney Disease & Transplantation. May (2013), Vol-25(3), 489-495.
4. Chung. J, Knowledge and opinion of deceased organ donation among middle & high school student in Korea, Journal of Transplant proceeding, December (2015). Vol-47(10), 2805-2809.
5. Cornwall. J, New Zealand university student knowledge and attitude to organ & tissue donation. The New Zealand Medical Journal. August (2015). Vol-7(128), 70-79.
6. Febrer, Knowledge of the brain death concept among adolescents in south cast Spain, Journal of Research Gate, December (2013).Vol-45, 3586.
7. Goodarzi. P, Tissue & organ donation & Transplantation in Iran. Journal of Springer Link, June (2014). Vol-16(2), 295-301.
8. Iltis. A, Organ donation, brain death & the family: Valid informed consent (2015).
9. Jacob. C, Gueguen. N, helping with all your Heart: Realistic heart stimulus & compliance with & organ donation request, Journal of Health Marketing Quarterly. Vol-32(3), 263-71. (2015).
10. AlHabeeb, W, Al Ayoubi. A, Tash. A, AlAhmari. L, & AlHabib, K. F, Attitude of the Saudi community towards heart donation, transplantation, and artificial hearts. Saudi Medical Journal. 38(7), 742-747. (2017).
11. Matesanz. R, Mahill. B, Alvarez. M, & Carmona. M, Global observatory and database on donation and transplantation: world overview on transplantation activities, Transplantation Proceedings, (2009), 41(6), 2297-2301.
12. Panchal Shaishav, Toral Desai, Perception and practices encouraging organ donation among doctors in Surat city, National Journal of Community Medicine. 2011; 2(2): 269-72.
13. Christina KY Chung, et al. Attitudes, knowledge and actions with regard to organ donation among Hong Kong medical students. Hong Kong Med J Aug. 2008; 14(4):278-85
14. Usha Bapat, Prashanth GK, Gokulnath. Organ donation, awareness, attitudes, and beliefs among post graduate medical students. Saudi J Kidney Dis Transpl. 2009; 20(1): 174-80.
15. O. Chung CKY, Ng CWK, Li JYC, et al. Attitudes, knowledge, and actions with regard to organ donation among Hong Kong medical students. Hong Kong Med J. 2008;14:278-285