



**ORIGINAL RESEARCH PAPER**

**Sociology**

**CAN AWARENESS ALTER ATTITUDE AND KNOWLEDGE ABOUT ORGAN DONATION?**

**KEY WORDS:** Brain death, Knowledge, attitude, organ donation

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**ABSTRACT**

**INTRODUCTION:** Organ donation is defined as an act of donating one or more organs voluntarily without compensation, to another person who needs transplantation. One organ donor can save up to 8 lives. Today organ donation rate in India is very low due to high gap in demand-supply chain. We can overcome this only through creating awareness and bringing out positive attitude towards organ donation. **OBJECTIVE:** The main aim of this study was to determine the attitude and to assess the level of knowledge about organ donation among student-nurses. **SAMPLE:** This study was conducted among a sample of 100 student-nurses studying in 3 nursing colleges in Nellore Town. **METHODOLOGY:** A questionnaire was developed to assess the level of attitude and knowledge about organ donation among student-nurses using a pretest-post-test design. **RESULTS:** Participant's knowledge improved considerably after conducting the awareness Program. Positive change in the attitude was observed to register themselves for organ donation voluntarily. **CONCLUSION** The results proclaim that the need to design and introduce a short term course or program covering the important aspects of organ donation for student-nurses.

**INTRODUCTION**

Organ donation is the surgical removal of an organ or tissue from a body (living or dead) of an individual (organ donor) for the purpose of transplantation into another person (organ recipient). Organs that can be donated and transplanted are kidney, heart, liver, pancreas, intestine and lungs. Tissues like skin, bone marrow, cornea, veins, cartilage, arteries and heart valves can also be donated just in the case of natural death. Organ donation may help a person, especially with end-stage organ disease.

The demand for organs for transplantation continues to exceed the limited supply everywhere on the planet. This gap of demand and supply is the main obstacles for transplantation. There is a scarcity of awareness and proper knowledge among public, myths and misconceptions surrounding organ donation due to religions and cultural barriers resulting in hesitancy within the donation of human organs. Although India is one among the highly populated countries within the world, it is facing an acute shortage of organ donors. In India, only 2% - 3% of the demands for the new organs are met.

The donation and transplantation system represents a posh practice and it depends on individual attitudes, cultural practices, social structures, and non-secular beliefs. Nurses have an important role to play in the process of promotion of organ donation. They can be involved in the procurement process and counseling of potential donors. In the hospital setting, they are usually the first person who comes in contact with the dying patients and brain death cases. So, they should be well equipped with the knowledge of organ donation. They should have the skill of differentiating between brain death and coma. "It has been acknowledged that formal training about organ donation can successfully influence student nurses' attitudes, knowledge about donor eligibility, registration behaviors, encourage communication and idea about cerebral death". Growth in organ donation rate can be possible by improving the knowledge about the organs suitable for donation, the methods available for registration and the regulations that govern the method of organ donation.

The objective of this study was to examine the attitudes and behavior of student-nurses and to assess their level of knowledge about organ donation before and after an awareness program. With this background, the current study

was conducted to assess the knowledge, attitude of student-nurses regarding organ donation.

**METHODOLOGY**

This study was conducted in three nursing colleges in Nellore town. It was a cross-sectional study of descriptive nature, conducted in the month of January 2020. The participants were belonging to 1.Narayana College of nursing 2.St. Joseph's College of nursing 3.Bollineni College of nursing. Using convenience sampling technique, a total of 100 nursing students were selected randomly taking 35 each from Narayana and Bollineni nursing colleges and 30 from St. Joseph's Nursing College.

A pre-test post-test design was chosen to determine the impact of an awareness program on knowledge and attitude involving two sets of cross-sectional data on an equivalent population.

A questionnaire consisting of 3 sections was used. Section-I consists of demographic variables like age, religion, sex, income of family, type of family etc. Section-II contains 15 questions to assess the knowledge regarding organ donation among nursing students, Section-III consisting of 15 questions to assess the attitude regarding organ donation among the subjects.

The participants completed the pre-test questionnaire based on attitude towards registration and donation, knowledge about brain death, financial incentives and legal aspects. Then an awareness program was conducted for the student-nurses on organ donation. The program was designed to emphasize on the areas like which organs can be donated criteria for organ donation and, transplantation procedure, concept of brain death, certification of death, effective communication with donors, recipients and their relatives, ethical aspects etc. The awareness program was delivered to the participants in a classroom setting in all the 3 nursing colleges separately. The same questionnaire was administered to the same group of student-nurses for post-test study, immediately after the awareness program.

**DATA COLLECTION**

Data were collected within an hour, after the completion of the awareness program. Again the questionnaire was

administered to the same population and asked to fill-up the questionnaire. The data was analyzed using statistical methods like mean, percentage etc.

**Table-1 Demographic profile of subjects (n= 100)**

VARIABLE		n (%)
Age	17-19	39 (39%)
	20-22	53 (53%)
	23-25	8 (8%)
Sex	Male	0 (0%)
	Female	100 (100%)
Religion	Hindu	56 (56%)
	Muslim	07 (07%)
	Christian	37 (37%)
Domicile Background	Rural	64 (64%)
	Urban	36 (36%)
Type of family	Nuclear	71 (71%)
	Joint	29 (29%)
Number of family members	2-4	63 (63%)
	5-7	37 (37%)
Monthly family income	<10000	6 (6%)
	10000-20000	65 (65%)
	>20000	29 (29%)

As per table-1, around 92% of the population was between 17 to 22 years of age. Mean age was 20.07 with a range of 17 to 25 years. All are females only. The majority of 56% belonged to the Hindu religion. 64% of the subjects belonged to rural area and 36% to urban area. A majority of 71% belonged to nuclear family and only 29% were from joint family. 63% were having the number of family members between 2 to 4 only. About 94% of the population were having monthly income ranging from Rs. 10,000 to Rs.20,000 and above.

**Table-2 Knowledge regarding organ donation among the student-nurses (n= 100)**

S. No	Question	Correct Responses [n (%)]	
		Pre-Test	Post-Test
1.	Family's consent should be considered for donation after death	74 (74%)	92 (92%)
2.	Consent is given by donor, for living donation	81 (81%)	96 (96%)
3.	The organs that can be donated are kidney, heart, liver, lungs, pancreas, and intestine.	56 (56%)	83 (83%)
4.	Organ donation means the removal of organs of a body for transplantation to another person	71 (71%)	87 (87%)
5.	It is a risk for the recipient in donating organs	78 (78%)	84 (84%)
6.	Organs can be pledged irrespective of age	63 (63%)	78 (78%)
7.	The organs like kidney, pancreas, and liver can be donated during life	44 (44%)	68 (68%)
8.	A person above 18 years of age can donate organs	38 (38%)	59 (59%)
9.	Brain-dead and heart beating patients are eligible for organ donation	29 (29%)	42 (42%)
10.	Time limit is 6 hours for eye donation after death	32 (32%)	41 (41%)
11.	Awareness regarding Acts & Laws on organ donation	4 (4%)	35 (35%)

12.	In case of unclaimed dead bodies, no one can make decisions about organ donation	5 (5%)	23 (23%)
13.	Brain-dead patients are clinically dead	3 (3%)	38 (38%)
14.	Brain-dead person can get back to normal	6 (6%)	37 (37%)
15.	Have you ever visited any website related to organ donation	2 (2%)	28 (28%)

**Table- 3 Assessment of attitude regarding organ donation among the student-nurses (n = 100)**

S. No.	Question	Correct Responses [n (%)]	
		Pretest	Posttest
1.	Considering oneself as a donor in the future.	47 (47%)	81 (81%)
2.	Organ donation should be supported.	59 (59%)	97 (97%)
3.	I believe that donated organs could be misused	22 (22%)	68 (68%)
4.	My religion does not support organ donation.	16 (16%)	84 (84%)
5.	Celebrities and wealthy people get priority during organ allocation	21 (21%)	62 (62%)
6.	Organ removal disfigures the body.	9 (9%)	57 (57%)
7.	Relation with the recipient matter, while donating my organs.	31 (31%)	66 (66%)
8.	More information and knowledge about organ donation is required	53 (53%)	69 (69%)
9.	The government should provide financial help to the donor family.	32 (32%)	36 (36%)
10.	Law needs to be changed so that everyone is encouraged to donate organs	19 (19%)	74 (74%)
11.	I support a change to the present system of organ donation	27 (27%)	79 (79%)
12.	If I sign a donor card, doctors might do something to me before I am really dead.	15 (15%)	47 (47%)
13.	Have you discussed your organ donation intentions with your family?	7 (7%)	53 (53%)
14.	Have you registered to be an organ donor?	0 (0%)	32 (32%)
15.	What do you think are the benefits of donation?	13 (13%)	89 (89%)

**RESULTS**

Table-2 shows the knowledge of the subjects regarding organ donation. Analysis of the results shows that 72% of the population knows about organ donation. Almost 56% could identify the organs that can be donated. A very few numbers know about brain death. Only 2% of the population knows about the website related to organ donation. From the table-1, it is evident that a positive change in the knowledge of the population can be seen regarding organ donation in the post-test.

Table-3 shows the level of attitude towards organ donation. The majority of the population supported organ donation and expressed willingness to donate in the future. 53% of the population wanted to acquire more knowledge and information about organ donation. Majority of the subjects

had misconceptions on organ donation. None of the participants had registered for organ donation, but after the post-test this can be observed that there was a considerable change in the attitude positively towards donating organs.

### DISCUSSION

The results from this study support that student-nurses' knowledge about organ donation can be substantially improved by the awareness program. There was a rise in awareness of the advantages of organ donation. Education about organ donation needs to be incorporated in the nursing curriculum. "The Spanish model of organ donation and transplantation" provides education to healthcare professionals, helping them to interact fully with organ donation and has directly resulted during a continuous rise in the number of families willing to pledge their organs.

It needs to be recognized that even though an individual pledge for organ donation, in many cases the final decision rests with relatives. Indeed a great challenge in organ procurement may be a failure to get consent from relatives of the potential donor. This is attributed to families not being made fully conscious of the prior wishes of the deceased. Communicating an intention to donate is frequently missed to family members.

This study has shown that even within a small group, after an awareness program, the understanding of organ donation and the processes involved can be significantly improved, leading to more number of organ donation registrations and discussion behaviors.

### CONCLUSION

An awareness program can effectively improve student-nurses' knowledge of organ donation and positively influence their ability to discuss organ donation intentions with their family. The effect of education provided as a component of nursing course, emphasizes various aspects of organ donation, transplantation, and organ procurement.

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