

# A Descriptive Study to Assess the Level of Knowledge and Attitude towards Awareness of Organ Donation among Staff Nurses at Tertiary Care Hospital, Karad

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**Abstract:** ***Introduction:** Donation is the giving of an organ and tissue to help someone that needs a transplant. Transplants can save or transform the life of a person. One organ and tissue donor can help transform the lives of more than 10 people. **Objective:** To assess the existing level of knowledge and attitude towards awareness of organ donation among staff nurses . **Methodology:** Cross-sectional study was adopted to explore the knowledge nurses possess and the attitudes they hold regarding organ donation the sample consisted of 60 staff nurses of tertiary care hospital and samples were selected using convenient sampling technique. **Result:** In Knowledge, majority of subject staff nurses 26 (43.3%) have average range of knowledge, followed by 19 (31.6% ) of subjects have good knowledge and minority subjects 15 (25%) have poor knowledge regarding. In Attitude, 40 (66.7%) know about organ donation and 34 (56.7%) support and promote organ donation. **Conclusion:** Nurses participating in the survey supported the idea of organ donation and would agree to donate promote organ donation. It is also assumed that their attitudes toward donating their own organs will influence their readiness to participate in the cooperation process.*

**Keywords:** organ donation, knowledge, attitude , Awareness, staff nurses

## 1. Introduction

Organ donation is the donation of organs of the human body or biological tissue from a living or dead person to a living recipient in need of a transplantation.<sup>(1)</sup> Any person above the age of 18 is eligible to become a donor irrespective of the background. Even younger population under 18 can donate with permission from parent or guardian.. A single donor's body can save up to 50 people. Age is not a constraint, which means that people aged 70 or 80 also can become successful donors<sup>(2)</sup>

Currently around 5,000 kidneys, 1000 livers and around 15 hearts are transplanted annually.<sup>(3)</sup> Finding a donor match is difficult to begin with in India, this challenge is compounded by bureaucratic hurdles and lack of awareness. The next challenge is that it is often difficult for family members to accept their loved one is brain dead.. Even if the family is ready to donate organs, superstitions and misconceptions become impediments .Another problem is that there are too few surgeons and hospitals equipped for transplants.<sup>(4)</sup>

Staff nurses must have basic information about the procedures and ethical issues related to organ donation. Despite the importance of the subject, few studies have assessed , Some of them indicated the suitable level of knowledge, attitude, and awareness of nurses while some studies show the weakness of these factors in nurses. This study has been carried out in order to analyze knowledge, attitude, and awareness of nurses regarding organ donation

and to sensitize them about topic. So that they will also motivate others while working in the hospital.

## 2. Literature Survey

- 1) M Babaie,<sup>1</sup> M Hosseini,<sup>2</sup> J Hamissi,<sup>3</sup> Z Hamissi (2015) ; About 150 nurses recruited in this cross-sectional study randomly. After taking informed consent, questionnaires were filled. The data collection tool was a multipart questionnaire including demographic information, 18 questions about attitude and practice and 15 questions about knowledge toward organ donation. Most of participants (76%) were 25-44 years old. About 81.3% of them were female (n=122). The attitude average score between males and females was 85.25±35.61 and 70.37±46.53, respectively. The practice average score in females was 34.43±47.71 and between males was 29.63±46.53. The knowledge average scores were 50.60±16.19 and 56.54±17.48 for two groups (p>0.05). There was a direct and significant relation between attitude and practice (r= +0.33, p<0.05), attitude and Factors influencing attitude and practice (r= 0.866, p<0.05), but the relation between attitude and knowledge was indirect and significant (r= -0.183, p<0.05)<sup>(5)</sup>
- 2) Ž Vlaisavljević , D .Milutinović , B Milići, R J-Vukićević (2014) .In this cross-sectional study, 291 nurses from the Clinical Center of Serbia, Belgrade, filled in the questionnaire on the effect of correlation between the length of the service and level of education on knowledge and attitudes toward organ transplantation

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and organ donation. Results Out of 291 respondents, 67.4% have completed the nursing school and 32.6% have higher education. The majority (63.9%) of respondents knew that the EEG was the most valid method for determining brain death. The question regarding the possibility of buying organs was answered correctly by 68.7% of respondents. A large majority (91%) would accept organ transplant, if needed, but only 32.0% would be organ donors, and only 0.3% owned a donor card. In contrast, one third of nurses were already blood donors <sup>(6)</sup>

### 3. Research Methodology

Cross-sectional study was adopted to explore the knowledge nurses possess and the attitudes they hold regarding organ donation the sample consisted of 60 staff nurses of tertiary care hospital and samples were selected using convenient sampling technique

**Description of tool :** A self reported questionnaire on knowledge and attitude assessment regarding organ donation among all staff nurses was prepared. It comprises of three sections.

#### Section A: Demographic sheet

It has 6 items pertaining to demographic information of staff nurses including age, gender, religion, educational qualifications, working area and year of experience

#### Section- B: Questionnaires on knowledge of organ donation.

It has 12 items in which questions related to Knowledge on organ donation were included. Right answer was given score '1' and wrong '0'. So the total Score of knowledge on organ donation ranged between 0 – 15

#### Section C: Questionnaires on attitude on organ donation

It has consisted of 12 items with 3 -point Likert scale that ranged from “strongly agree to disagree “to assess participant’s attitude towards organ donation. Points ranging from 3 to 1 were given to each response such that the more positive the response, the higher the score. The total possible scores for this scale range from 12 to 36.

#### Method of Data Collection

After obtaining ethical committees permission from the Krishna institute of medical sciences deemed to be university Karad. The subjects were identified according to the inclusion and exclusion criteria by random sampling technique. The purpose of study was explained to the participants and ensured that the individual information will be kept private and after they signed consent forms. Questionnaires were validated and modified as per expert’s suggestion. A time schedule was planned for collecting the data. The average time required for each data collection was approximately 30 minutes. A structured knowledge & attitude

questionnaire were used to assess the knowledge & attitude of staff nurses regarding awareness of organ donation. Data analyzed through Descriptive data were analyzed using

frequency, percentage. Chi-square and One-way ANOVA were used for comparing means of normally distributed continuous variables

#### Inclusion Criteria

- Male and female nurses those who are willing to participate in the study.
- Staff nurses who are available during the period of data collection.
- All the senior and junior nurses who can write and speak English/Marathi.

#### Exclusion Criteria

Nurses who are not available during the period of data collection and the nurses who have already attended the awareness program regarding organ donation

### 4. Results

#### Section – I

This section deals with demographic details of subjects under study. A total of 126 eligible subjects returned the questionnaire.

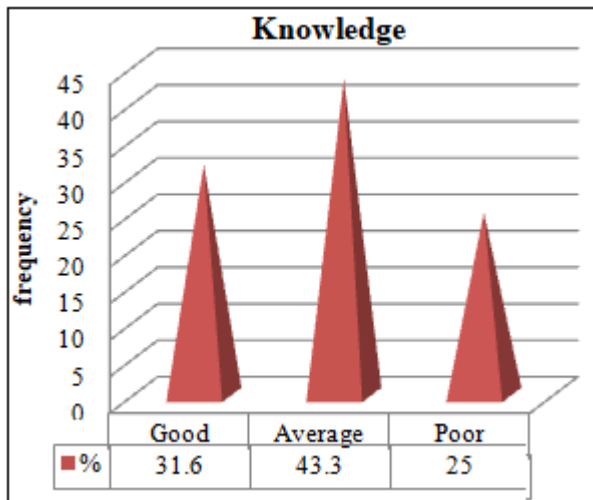
**Table 1: Socio-demographic characteristics of the Subjects**

Demographic variables	Frequency (n)	Percentage (%)
<b>Age group</b>		
<= 23years	17	28.3
24-30	27	45
>=31	16	26.6
<b>Gender</b>		
F	53	88.3
M	7	11.6
<b>Religion</b>		
Hindu	44	73.3
Others	16	26.6
<b>Education</b>		
ANM	20	33.3
GNM	20	33.3
P.B.SC	20	33.3
<b>Experience</b>		
<=1y	19	31.6
2y-4y	21	35
>=5y	20	33.3
<b>Working area</b>		
Dental	15	25
Ward	34	56.6
Ward ICU	11	18.3

Table 1 shows that Among 60 , maximum participants 27 (45%) of them are in the age group of 24-30 years , 53(88.3%) of them are female , 44 (73.3%) of them are Hindu in religion . maximum participants 21 (35 %) of them were belong to 2-4 years of experience and most of subjects 34 (56.6%) were working in the ward and 20 (33.3%) equal distribution of participants with educational qualification of ANM ,GNM AND P.Bsc

#### SECTION –II

**Knowledge and attitude about organ donation :**This section deals with assessment of existing level of knowledge and attitude of organ donation among staff nurses .



Graph 1: Knowledge regarding organ donation

From the 60 staff nurses who answered the survey, the mean score was 8.6 (SD 1.6), with the highest score being  $\geq 10$  and the lowest score being  $\leq 7$ . From Graph 1 it is found that majority of subjects 26 (43.3%) have average range of knowledge, followed by 19 (31.6%) of subjects have good knowledge and 15 (25%) have poor knowledge about organ donation

Table 2: Attitude regarding organ donation

Items	Strongly agree	%	Agree	%	Disagree	%
I know about organ donation.	19	31.7	40	66.7	1	1.67
I support and promote organ donation.	34	56.7	25	41.7	1	1.67
Organ donation procedure, policies are available in our setting.	12	20	40	66.7	8	13.3
I think religion matters in organ donation process.	11	18.3	16	26.7	33	55
I think organ donation will disfigure body.	8	13.3	21	35	31	51.7
I think organ donation is safe, effective practice.	17	28.3	36	60	7	11.7
Organ donation gives a some positive outcome from person's death.	20	33.3	34	56.7	6	10
Organ donation is consistent with moral values and beliefs.	19	31.7	31	51.7	10	16.7
There should be separate cell for organ donation.	14	23.3	34	56.7	12	20
Nurse has role in organ donation.	26	43.3	27	45	7	11.7
Family members and others are important in organ donation process.	33	55	23	38.3	4	6.67
Organ donation in India is feasible process.	13	21.7	38	63.3	9	15

Table 2 describes attitude of staff nurses regarding organ donation, among 60 participants 40 (66.7%) know about organ donation and 34 (56.7%) support and promote organ

donation. Majority of participants 40(66.7%) agree that they knew organ donation procedure. Majority of them felt that 31 (51.7%) Organ donation does not disfigure the body and 33 (55%) religion doesn't matters in organ donation process. 36 (60%) agree that organ donation is safe, effective practice and 34 (56.7%) felt that organ donation gives a some positive outcome from person's death. 27 (45%) agree followed by 26 (43.3%) strongly agree that Nurse has role in organ donation as well as 33(55%) strongly felt that Family members and others are important in organ donation process. Majority participants 38 (63.3%) support that organ donation in India is possible process.

**Section III: Association of demographic variables with knowledge regarding organ donation among medical faculty**

Table 3: Association of demographic variables with knowledge

Demographic variables	Readings	Total	Good	Average	Poor	F value	p value
Age group	$\leq 23$	17	6	7	4	0.5	0.45
	24-27	22	6	9	7		
	$\geq 28$	21	7	10	4		
Gender	F	53	17	23	13	0.1247	0.8871
	M	7	2	3	2		
Designation	ANM	20	6	10	4	0.55	0.0444
	GNM	20	6	7	7		
	P.B.SC	20	7	9	4		
	Professor	5	5	0	0		
Experience	$\leq 1y$	19	5	8	6	0.5561	0.593
	2y-4y	21	9	8	4		
	$\geq 5y$	20	5	10	5		

ANOVA test was used to compare categorical variables. The analysis revealed that there is significant association was found knowledge with age and designation only ( $p < 0.05$ ) and no significant association was found with gender, year of experience, religion and working area hence we conclude that there is no significant association between the knowledge scores of staff nurses with demographic variables.

**5. Discussion**

In almost every country, the organ supply for transplantation does not match the increasing demand; health professionals may play an important role in eliminating barriers and increasing organ donation<sup>(8)</sup> The study findings revealed a relatively average level of knowledge and attitude of organ donation among staff nurses ..

**Section I: Findings in relation to the demographic variable**

Among 60, maximum participants 27 (45%) of them are in the age group of 24-30 years, 53(88.3%) of them are female, 44 (73.3%) of them are Hindu in religion. maximum participants 21 (35%) of them were having 2-4 years of work experience and most of subjects 34 (56.6%) were working in the ward and 20 (33.3%) equal distribution of participants with educational qualification of ANM, GNM AND P.Bsc

## Section II – Findings in relation to knowledge about the organ donation .

In the present study revealed that, Among 60 majority of subject staff nurses 26 (43.3%) have average range of knowledge, followed by 19 (31.6%) of subjects have good knowledge and minority subjects 15 (25%) have poor knowledge regarding organ donation . A study among medical students conducted by Hosam H et al in Egypt<sup>(8)</sup> found that out of 359,230 responders (64%) had poor knowledge while 129 responders (36%) had good knowledge about organ donation K. Chakradhar conducted study in Indian Dental Students found that When levels of correct knowledge were considered, the majority of the participants (n=195, 65.4%) had average knowledge (50%–75%); it followed by 68 (22.8%) with high levels of knowledge (>75%) and 35 (11.74%) with low levels of knowledge (<50%)<sup>(9)</sup> A study conducted by Sunita Tata among medical faculty also revealed that that majority of medical faculty 92 (73%) have average range of knowledge, followed by 14 (11%) of have good knowledge and minority s 20 (16%) have poor knowledge about organ donation with chi-square 16.531 with p-value 0.003<sup>(10)</sup>.

## Section III – Findings in relation to attitude about the organ donation

In the present study, among 60 participants 40 (66.7%) know about organ donation and 34 (56.7%) support and promote organ donation. this was high when compare study done by H.Belgel found that About 17.1% of them would donate their organs without any hesitation, and a further 41.3% had some doubts and needed persuasion<sup>(7)</sup> This was contrary to the findings from Annadurai K<sup>(11)</sup> Of the 440 participants, only 127 i.e., 28.9% were aware about the meaning of organ donation and Seventy- five percent of the participants were in the favor of promoting organ donation in the future.

In current study , Majority of the participants felt that 31 (51.7%) Organ donation does not disfigure the body and 33 (55%) religion doesn't matters in organ donation process. 36 (60%) agree that organ donation is safe, effective practice and 34 (56.7%) felt that organ donation gives a some positive outcome from person's death. Similar finding found in Annadurai K<sup>(11)</sup> 219(49.77%) said they will donate to any person. 12.72% said they will donate for their family members. The majority of the participants i.e., 43% want to donate for young persons. Religion is not the matter when considering organ donation for 94.54% of the participants. And in the study by Sukhpal K pointed out that there was strong disagreement among 45% subjects with regard to religion not supporting organ donation. Fifty-one percent disagreed that organ or tissue removal disfigures the body. Forty percent disagreed that physical and psychological disabilities of recipients matter in their decision to donate organ<sup>(12)</sup>

Study conducted by Marta M-S among nurses. The results of the presented study confirmed that in the professional group of nurses a definite majority of respondents supported the idea of transplantation (73%). Only 12% of the surveyed subjects objected to donation, and 15% hesitated about this problem. In the surveyed group ready to donate their organs after death, 100% would also agree to donate their organs

during their lifetime, while only 44% would donate organs to close persons. In the studied group of 'hesitating' subjects, as much as 92% would agree to donate their organs during their lifetime to a close person.<sup>(13)</sup>

**Section IV – Findings in relation to Association of demographic variables with knowledge and attitude regarding organ donation among staff nurses.** The analysis revealed that there is significant association was found knowledge with age and designation only ( $p < 0.05$ ) and no significant association was found with gender ,year of experience ,religion and working area hence we conclude that there is no significant association between the knowledge scores of staff nurses with demographic variables .

## 6. Conclusion

Nurses participating in the survey supported the idea of organ donation and would agree to donate promote organ donation. . It is also assumed that their attitudes toward donating their own organs will influence their readiness to participate in the cooperation process<sup>(7)</sup> as They supporting families through the organ and tissue request process In conclusion, it is recommended that nurses be provided with more detailed advice and guidance on managing the family in the many aspects of such a situation Since the medical team have the most important guideline to promote activities related to organ donation findings highlight the need for training programs for treatment team and empowering them in all matters relating to donations of organs.

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