

## Knowledge and attitude of people attending a Medical College & Research Foundation towards Organ donation

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### Abstract

Organ and tissue transplantation has become an integral part of health care in every nation. Hence it becomes important to know knowledge, attitude & belief of patients who visit the hospitals.

**Methodology:** A cross sectional descriptive study was designed & a questionnaire survey was conducted among patients visiting the college.

**Results:** The overall knowledge among study participants was 27.84%. And there was no statistical difference between the genders & graduation.

**Conclusion:** The results of the study revealed the urgent need for addressing this knowledge gap by conducting awareness sessions in medical schools and also engage them in discussions during mass campaigns.

**Keywords:** Organ Donation, Out patients, Attitude, Belief.

### Introduction

Organ donation is the donation of biological tissue or an organ of the human body, from a living or dead person to a living recipient in need of a transplantation.<sup>(1)</sup> Organ and tissue transplantation has become an integral part of health care in every nation. Organ donation is a community service, which saves lives, improves quality of life and has cost benefits for society.

In recent years, the cost of transplantation has become significantly lower and organ transplantation is one of the most effective lifesaving procedures.

But Organ shortage is a Global problem. Asia lags much behind rest of the world. Statistics show that Australia has 11 organ donors per million, Britain has 27, Canada has 14, Spain has 35.1 & USA has 26 donors per million whereas India has only 0.08 donors per million population (PMP).<sup>(2)</sup>

The lack of organ donation is a major limiting factor in transplantation in most countries.<sup>(3)</sup> Cadaver donation is not a familiar concept among the Indian public. Myths and misconceptions exist at large.<sup>(4)</sup> Some studies have suggested that knowledge, attitude and determinants concerning this issue are influenced by many factors including gender, educational level, occupation, sociodemographic status, income level, culture and religion.<sup>(5,6)</sup>

As of now there are no published information relating to the knowledge of organ donation among subjects attending a Medical College and Research Foundation. Hence, the aim of this study is to explore the knowledge, attitude and belief of outpatients towards organ donation in Sree Gokulam Medical College and Research Foundation & to find the predictors of knowledge levels and motivation towards organ donation.

### Methodology

**Study design:** Cross sectional descriptive study.

**Study source:** Subjects visiting outpatient Dept. of Dentistry, Sree Gokulam Medical College and Research Foundation.

**Questionnaire:** Questionnaire containing closed ended questions was designed in native language to obtain information about knowledge and attitude of subjects towards organ donation.

**Method of Data Collection:**

**Sample size:** 270 subjects.

**Inclusion criteria:**

1. Individuals in the age group of 20 years and above.

**Exclusion Criteria:**

1. Individual who does not give consent.

2. Person with mental retardation.

Necessary ethical clearance obtained from ethical clearance committee of the institution. Subjects were selected from Dept. of Dentistry, Sree Gokulam Medical College and Research Foundation, Kerala. Individuals were explained about the objectives of the study and information was collected from those individuals consenting to participate in the study.

Questionnaires were distributed without giving any prior information related to organ donation and procedure of organ donation. Participants were given sufficient time to fill up the questionnaire and filled questionnaires are collected back on the same day.

**Statistical analysis:** Descriptive statistics was computed and data was statistically analyzed using chi square analysis with a p value <0.05 considered as statistically significant with 95% confidence interval. Validity of the questionnaire was checked by using kappa statistics (0.86).

## Results

Table 1 shows demographic characters of study population. There were a total of 270 subjects out of whom 111 (41.11%) were males and 159 (58.88%) were females, 170 (62.96%) were graduates and 100 were non graduates. Hindus (54.07%) were slightly more than compared to Muslim (15.5%) and Christians 146 (30.37%). 74.81% of the subjects were from nuclear family.

**Table 1: Demographic Characters of Study Population (n= 270)**

Sociodemographic variables		Frequency	Percentage
Graduation	Graduates	170	62.96%
	Non Graduates	100	37.07%
Gender	Males	111	41.11%
	Females	159	58.88%
Religion	Hindu	146	54.07%
	Muslim	42	15.5%
	Christian	82	30.37%
Income	0 - 10000	33	12.22%
	10000 - 25000	34	12.59%
	25000 - 50000	46	17.03%
	> 50000	157	58.14%
Type of family	Nuclear	202	74.81%
	Joint	68	25.19%

Table 2 shows Awareness about organ donation among graduates and non graduates. Awareness level was slightly more among graduates (89.41%) than compared to non graduates (83%) the result was statistically non significant ( $p>0.05$ ). Awareness about organ donation according to gender was also was statistically non-significant ( $p>0.05$ ).

**Table 2: Awareness about organ donation among graduate and Non graduates & Genders (N= 270)**

Graduation	Awareness		Chi Square test	P value	Significance
	Yes	No			
Graduates	152 (89.41%)	17 (10.59%)	2.294	0.138	NS
Non Graduates	83 (83%)	18 (17%)			
Males	95 (85.58%)	18 (16.21%)	0.833	0.361	NS
Females	140 (88.05%)	19 (11.94%)			

$P<0.05$ , NS – Non Significant.

Table 3 shows Source of Information about organ donation among study participants. The major source of information came out to be television (41.17%). This finding is important because electronic media can be used for further awareness of people. The second major source of information was internet (31.17%).

**Table 3: Source of Information about organ donation among study participants**

Source of Information	Frequency	Percentage
Physician	13	7.65%
Family Members	44	25.88%
Friends	37	21.76%
News Paper	35	20.58%

Television	70	41.17%
Internet	53	31.17%
Others	18	10.58%

Table 4 shows Knowledge of study subjects towards organ donation. The overall knowledge among study participants was 27.84%.

**Table 4: Knowledge of study subjects towards organ donation**

Question	Yes	No	Don't Know
Ideal Time to Retrieve Organ	89 (32.96%)	68 (25.18%)	113 (41.85%)
Law Governing	77	32	161

	(28.51%)	(11.85%)	(59.62%)
Where You can Remove Organ	27 (10%)	115 (42.59%)	128 (47.40%)
Organ Donation Causes Disfigurement	37 (13.70%)	118 (43.70%)	115 (42.59%)
Religion allow	146 (54.07%)	24 (8.88%)	100 (37.07%)

Table 5 shows willingness of study subjects to donate organs 71.64% of graduates and 74% of Non-graduates were having a willingness to donate the organs. Overall willingness was 72.59% among study participants.

**Table 5: Willingness of study subjects to donate organs**

Graduation	Frequency	Percentage	Chi Square	P value and significance
Graduates	122	71.64%	0.158	0.401 NS
Non graduates	74	74%		
Total	196	72.59%		

p>0.05 NS – Non Significant.

Table 6 shows Attitude of study subjects towards organ donation. The overall positive attitude among study subjects was 48.66%.

**Table 6: Attitude of study subjects towards organ donation**

Variables	Positive attitude
Service to man kind	245 (90.74%)
do you think organ donation should be promoted	225 (83.33%)
Attitude of your organ being donated	59 (21.85%)
Do you think it could be misutilized	27 (10%)
Need for having affective law	101 (37.40%)

**Discussion**

As the proportion of population faced with chronic diseases leading to end organ failure increases, so does the demand for organ transplantation. Being in health care profession it is imperative that we understand issues related to organ donation, so we may better promote and disseminate information regarding it.

According to Ashraf O et al<sup>(7)</sup> overall, globally the prevalence of knowledge for organ donation ranges from 60% to 85% using different knowledge variables. In the present study overall knowledge of study subjects was 27.84%. Results are similar to Survey conducted in the state of Maharashtra, India, 32.1% of respondents were aware of body donation, compared to 95.83% of health care professionals.<sup>(8)</sup>

Willingness to donate organ in the present study was 72.59% study findings are different from other developing countries like Nigeria where only 30% of the respondents expressed willingness.<sup>(9)</sup>

In a study from Ohio, over 96% of respondents expressed favorable attitudes toward donation where as in our study overall positive attitude was 48.66%.<sup>(10)</sup>

One of the key issues regarding organ donation is its allowance in religion. From this point of view 54.07% of the subjects were of the opinion that religion allows organ donation.

In the present study a total of 270 subjects participated who achieved an adequate knowledge score for Organ Donation where the field of education, income group and region from which they hail were found to have a significant association with knowledge scores of organ donation.

Seventy seven percentage of participants responded that they ‘strongly approve’ organ donation, whereas 22.1% mentioned they ‘somewhat approve’ organ donation. A majority of participants 90.6% responded that organ donation should be promoted.

**Conclusion**

We found that awareness on organ donation among people attending Sree Gokulam Medical College and Research Foundation is lacking and there exists significant gaps in their knowledge on the same. The results of the study revealed the urgent need for addressing this knowledge gap by conducting awareness sessions in medical schools and also engage them in discussions during mass campaigns. This will contribute to the improvements in their knowledge levels. Educated health public will play critical role in motivating the public for the cause of promotion of organ donation.

**Implications**

A huge gap exists between patients who need organ transplants and potential donors. It's not that there aren't enough organs to transplant. Nearly every person who dies naturally or in an accident is a potential donor. Even so, innumerable patients cannot find a donor. Public health attitudes to cadaveric organ donation and transplantation are a major public health Problem and of importance, since prior consent of the donor or their close relative at the time of death forms the basis for cadaveric organ donation in most countries. Hence an attempt will be made to know the knowledge and attitude of general public towards organ donation.

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