

**Assess The Knowledge and Attitude Regarding Organ Donation Among The Relatives of Patient Admitted in Selected Hospitals**

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**ABSTRACTS**

**Background:** Organ donation is the practice when a person agrees an organ of their own to be detached and transplanted to a new person, legally, either by mutual understanding while the donor is alive or dead with the consent of the next of kin. Donation of organs is an essential element of transplantation. One of the major issues contributing to the paucity of organs is because of public attributes such as myths, religious misconceptions, and misunderstood decrees. Many previous studies have indicated that knowledge and attitude play a significant role in rates of organ donation.

**Objectives:** The researcher was intended to assess the knowledge and attitude regarding organ donation among the relatives of patient admitted in general wards of selected hospital.

**Material & Methods:** A descriptive, Quantitative research study was conducted to assess the knowledge and attitude towards organ donation among relatives (60) of patients admitted in a selected hospital. The study samples were recruited by convenience sampling technique. The investigator collected the data through structured knowledge questionnaire and attitude scale. Scoring interpretation was done as adequate knowledge, moderately adequate knowledge and inadequate knowledge and positive attitude and negative attitude. Collected data was interpreted and analyzed by descriptive and inferential statistics.

**Results:** The study findings revealed that, among all the participants 95% participants had average knowledge, 5% had inadequate knowledge and no one had adequate knowledge regarding organ donation and 48.33% had positive attitude and 51.67% have negative attitude towards organ donation. The demographic characteristics of the participants had no association with their knowledge regarding organ donation.

**Conclusion:** The knowledge and attitude towards organ donation was found less among the participants. Public education to create Awareness among common population is highly required and health authorities must ensure that, the hospital staffs are sensitizing the relatives of the patients during their hospitalization.

**Keywords:** Knowledge, Attitude, Organ donation, Awareness, Hospitalization

**1. INTRODUCTION**

Organ donation is a gracious act in which the body organs are transferred from one person to another. In many cases, the donor chooses to offer his body organs after his death. The rationale of body organ donation is to help someone in need of the donated organs. As of today, most government bodies motivate organ donation to save human life. Most of the major religions also support the selfless act of organ donation. A latest report has explored the fact that one organ and tissue donor can change the lives of nearly 50 individuals in a constructive manner. Organ donation makes it possible for an individual to get involved in this selfless act of saving human life.<sup>1</sup>

Globally, organ transplantation yields thousands of lives. The issue of organ donation is tough and multi-factorial, involving medical, legal, ethical, organizational, and socio-cultural factors. According to WHO; kidney transplants are carried out in 91 countries. Around 66,000 kidney donations, 21,000 liver donations and 6000 heart donations were transplanted globally in 2005. Organ lacking are a global problem, but Asia lags behind much of the rest of the world. Only 5% of all patients suffer from organ transplantation related issues. The current need in the country for kidney transplants is 150,000; liver, 200,000 and heart, 150,000.<sup>2</sup>

Every year, around six lakh people die due to organ failure. Equally, with 70 per cent of India's 1.4 lakh accident victims diagnosed as brain dead annually, the country has 80,000 potential organ donors. Yet, organs from only about 120 are received, making the ratio of cadaver donations a dismal 0.08 per million of the population, according to MOHAN Foundation. On the other hand, in most developed countries, the cadaveric conversion is about 25% to 30%. This ends up in 90% of all organs for transplants arriving from brain-dead donors.<sup>3</sup>

An alive person can donate organs, or after ordinary death or after confirmed as 'brain death'. The shortage in organ supply is because of lack of awareness and clean knowledge among public, myths and misconceptions adjoining organ donation due to religious and cultural obstacles leading to doubtfulness in donation of human organs. It has also been recognized as due to the lack of enthusiasm of family members to donate due to fear of the surgery effects loss to their health, smaller nuclear families with incompatible donors and a deceased donor activities that is still developing.<sup>4</sup>

**Hypothesis**

H<sub>1</sub>: There will be significant association between knowledge and selected demographic variables of relatives of patients

**2. MATERIAL & METHODS**

A descriptive study was conducted to assess the knowledge and attitude regarding organ donation among relatives of patient admitted in General wards of selected Hospital. 60 relatives were selected by non probability convenience sampling technique through inclusion and exclusion sampling criteria. According to that, relatives of patients who can read & understand Gujarati or English and were included and those who are not willing to participate in the study were excluded from the study. Data collection was planned by collecting demographic characteristics of the samples such as age, gender, religion, monthly income, education, occupation, source of information, previous knowledge regarding organ donation. Knowledge questionnaire was used to

assess the level of existing knowledge regarding organ donation among the relatives of patients. Questionnaire consists of 30 multiple choice questions each carrying 1 mark. Total marks 30. Maximum marks 30 and minimum marks 0.

**Scoring interpretation of structured knowledge questionnaire**

- Adequate knowledge = > 66% ( score 20 and above 20 )
- Moderately adequate knowledge = 33-66% ( score between 10-19 )
- Inadequate knowledge = < 33% ( score less than 10 )

Attitude towards organ donation was assessed by likert type scale. The scale consists of 14 items with 5 ratings. Maximum score is 70 and minimum score is 14

**Scoring Interpretation of attitude scale**

- Positive attitude= 42-70
- Negative attitude= 14-41

Pilot study was conducted by taking seven samples and data was collected by structured knowledge questionnaire and attitude scale to assess the feasibility and practicability of conducting main study. Content validity of the tool was ascertained in consultation with guide and experts like physician and nurse. Reliability of the tool was done by split half method. Prior to the study, written permission was obtained from the concerned authority an informed consent was obtained from the study subjects. The process of the study was explained to the subjects. Data was collected after getting informed consent from the relatives by explaining the purpose the study. The investigator was introduced to the participants. The tool was administered and after 20 minutes the questionnaire was collected. The demographic variables were analyzed by using descriptive measures (frequency and percentage). Association between knowledge regarding organ donation and their selected socio-demographic variables was analyzed by using chi square.

**RESULTS****Frequency and percentage distribution of samples according to demographic characteristics**

It was found that, among the 60 participants majority 3.33% belongs to the age group of above 35 years and 32 samples (53.33%) were females and 25 samples (46.67%) were males. In terms of religion, majority 83.33% (51 samples) were from Hindu religion. Almost that majority 40% (21 samples) were illiterate, 11.67% (7 samples) had school education. Out of the 60 samples, 56.67% (34 samples) were employed and 43.33% (26 samples) of the population were unemployed. that 91.67% (55 samples) are married and 8.33% (5 samples) of the population are unmarried shows that 43.33% (26 samples) had previous knowledge regarding organ donation and 56.67% (34 samples) of the population did not have previous knowledge regarding organ donation.

**Assessment of existing knowledge level of patient’s relatives**

n=60

<b>Grade</b>	<b>Score</b>	<b>Frequency</b>	<b>%</b>
Adequate knowledge	>20	0	0 %
Moderately Adequate knowledge	10-19	57	95 %
Inadequate knowledge	<10	3	5 %

It was found that 57% samples were having moderately adequate knowledge, and 3% samples were having inadequate knowledge and none of them had adequate knowledge.

**Assessment of attitude regarding organ donation among relatives of patients**

n=60

<b>Grade</b>	<b>Score</b>	<b>Frequency</b>	<b>Percentage</b>
Positive attitude	42-70	29	48.33%
Negative attitude	14-41	31	51.67%

Above table depicts that majority 31 samples (51.67%) had negative attitude towards organ donation and 29 samples (48.33%) had positive attitude towards organ donation

**Association between knowledge levels with selected socio demographic variables**

The findings revealed that, obtained  $X^2$  values 39.99 with df-1 is greater than the table value at 0.05 level of significant so it is found significant. The other demographic variables such as age, gender, religion, education, marital status and previous knowledge about organ donation are found no significant. As there is no significance associated between knowledge and selected demographic variables, Hence the hypothesis  $H_1$  is rejected

**3. DISCUSSION**

The present study findings shows, 95% participants had average knowledge & 5% had inadequate knowledge and no one had adequate knowledge regarding organ donation and 48.33% had positive attitude and 51.67% have negative attitude towards organ donation. These findings coincide with the similar type of study conducted by K. Chakradhar, (2014), among UG dental students. Among all the participants Hindus and Muslims obtained considerably lower mean knowledge, attitude and practice behavior compared to others ( $p<0.001$ ). They shown a positive correlation between knowledge, attitude, and practice habits.<sup>5</sup>

Another cross sectional study conducted by Mahboob Pouraghaei (2014), on relatives of trauma patients referred to the emergency department of Sina Hospital, Tabriz, Iran, through 2013 to 2014, showed that 73.1% of participants agreed with organ donation. The major reasons of disagreements were dissatisfaction of other relatives and religious beliefs. 62.0% of the studied people had positive view regarding organ donation and 34.2% of them well informed about. The most important causative factors for poor knowledge in this context were male gender and self-employed occupation. In addition, poor knowledge and self-employed job were two factors associated with inappropriate attitude toward organ donation.<sup>6</sup>

**Nikola RL (2002)**, carried out a cross sectional study among women have particularly more positive to donate their organ to relatives during the time they alive (97.8%), while 81.5% males would do the same,  $p=0.035$ . Both the gender was shown differences regarding information, attitudes and willingness to make a sacrifice. Women were more ready to donate organs to a family member. But, there is not enough conversation about transplantation inside each family. Rate of knowledge and lack of information about transplantation and organ donation, insists a need for significant representation of this issue in media, schools, religious organizations and inside family.<sup>7</sup> The present study findings revealed that 29 participants had positive attitude and 31 participants had negative attitude towards organ donation. The findings also supported by the study conducted by Verma SK. Medical students, (2000), among UG medical students. Study revealed the willingness to agree their organs after death 53.5% participants replied positively and 32.4% stated they would donate organs irrespective of the situation. This is significantly less compared to the results from Brazil 15, French 17 and Turkish studies 18 where 69.2%, 81.1%, 65.5% reported their willingness to donate organs after death positively. In this study, 76.5% stated it to be against law for donating organs as a source of yielding money.<sup>8</sup>

The results has been discussed with the cross sectional study done by Salmani Nadoushan M, (2014), among 560 Iranian physicians. The study explored that 95% had average knowledge, 5% had inadequate knowledge and no one had adequate knowledge regarding organ donation and 48.33% had positive attitude and 51.67% have negative attitude regarding organ donation. Of 560 participants, 435 (78%) accepted with organ donation after demise and 285 (51%) said yes with living kidney donation. Only 32 (6%) professionals had no knowledge about transplantation procedure. Awareness about theoretical foundations and economical issues of transplantation was noted in 265 (47%) and 221 (40%) participants, respectively.<sup>9</sup>

In a study carried out in Tamil Nadu amongst college students, results explored that 28.9% of the students were knew the meaning of organ donation<sup>10</sup>. A study conducted in Greece found that nursing students were expressed their willingness to donate and many of them were ready to register, but they weren't aware of the formality. In contrast to medical students, British youth was in side of donation, but few of them were ready to sign up for donation whereas they were optimistic to be the recipient<sup>11</sup>.

#### **4. CONCLUSION**

It was found that there was a discrepancy in knowledge and attitude regarding organ donation among the relatives of patients admitted in general wards. In order to change this deficit, government and health authorities have to initiate awareness programmes throughout the country. Organ donors must be encouraged and motivated to come forward in any emergency situations to donate body organs.

#### **Ethical clearance**

The study was conducted after obtaining written consent from the participants and approval from the institutional ethics committee.

#### **Conflict of interests**

The author declares that there is no conflict of interest to disclose.

**Source of funding**

The researcher didn't receive any funding from other sources and declares that this is a researcher's self funded project.

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